DOCUMENT RESUME

ED 242 335 IR 050 697

AUTHOR Hamilton, David D.; Tucker, Richard N.
TITLE Resources Centres in Scottish Schools.
INSTITUTION Scottish Council for Educational Technology, Glasgow.
REPORT NO ISBN-0-86011-066-4
PUB DATE 83
NOTE 49p.
PUB TYPE Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Catalogs; Educational Media; Elementary Secondary Education; Evaluation Criteria; Foreign Countries; Institutional Cooperation; *Learning Resources Centers; Library Facilities; *Library Materials; *Library Services; *Nonprint Media; Publications; Questionnaires; Reprography; *School Libraries
IDENTIFIERS *Scotland

ABSTRACT

A survey of 152 Scottish primary and secondary schools was conducted in 1982 to determine the extent of development, organization, and services of school library resources centers. Teachers and school librarians from 129 schools replied to the questionnaire, with 124 respondents indicating the presence of a resources center in their school. Information was collected on the organization of book and non-book materials within the entire school; the presence of a catalog of library and/or school resources; the availability of areas for preparation of resources, study areas, and reprographic equipment; the links existing between school resources centers; and the knowledge that schools have of the holdings of other centers in their district. It was found that school resources centers in Scotland do not exist in the abundance that was presumed prior to this study, regardless of whether findings were compared with a model definition of a resources center developed by Norman Beswick, or considered independently of established criteria for resources centers. This report describes survey methodology and findings and also discusses the definition of the term "resources center." A 23-item bibliography, a sample questionnaire, and a summary of respondents' comments on the questionnaire are also provided. (ESR)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED242335

THE
SCOTTISH COUNCIL FOR
EDUCATIONAL TECHNOLOGY

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

RESOURCES CENTRES IN SCOTTISH SCHOOLS

DAVID D. HAMILTON
&
RICHARD N. TUCKER

IR050 697

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

R.N. Tucker

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Published and distributed by the
Scottish Council for Educational Technology
Dowanhill
74 Victoria Crescent Road
GLASGOW
G12 GJN

© SCET 1983
Other than as permitted under the Copyright Act 1956, no part of this document may be photocopied, recorded or otherwise reproduced, stored in any retrieval system or transmitted in any form by electronic or mechanical means without the prior permission of the copyright owner.

First published 1983
ISBN. 0-86011-066-4.

ACKNOWLEDGEMENTS

We have benefited, in thinking about resources centres, from discussions with members of our advisory committee, colleagues and school staff. We are grateful to all the teachers and librarians who responded to our survey requests. We thank also some individuals — R. M. Rhodes, Headteacher, Spondon School, Derby, for allowing us to visit and learn from his activities, Gavin McFadyean, Adviser in Primary Education, Glasgow, for his many helpful insights and suggestions in the formulation of our questionnaire, and Ann Drummond for her patience and efficiency in the preparation of the typescript.

RESOURCES CENTRES IN SCOTTISH SCHOOLS

FOREWORD

The Resources Liaison Project began in 1977 and has already produced the two main publications which described the official provision of learning resources in Scotland and the view that teachers had of these. SCET believes that these are valuable contributions to the current debate on resource organisation. The recommendations made by the Project Steering Group have already been passed to the Education Authorities in Scotland.

Any development work must take place within a known context if its effectiveness is to be properly judged. For a number of years there has been a sense of pride and achievement in the extent to which resources are used in our schools. The "Resources Centre movement" appeared to have made a significant impact on the organisational patterns in schools. The survey which was conducted as part of the Resources Liaison Project is the first large scale analysis of the way in which these resources centres are organised.

The findings should give us all cause for looking more closely at our assumptions of the success of resource organisation.

R B Macluskie

12th November, 1982

INTRODUCTION

In September 1977 the Scottish Council for Educational Technology sponsored a three year research programme under the title of the "Resources Liaison Project". This followed discussions on the need to establish a network of resources centres serving primary and secondary education in Scotland.

Our research was an attempt to provide details about the provision and use of resources in Scottish primary and secondary schools. Thus, SCET would have firm evidence on which to base proposals for future policies in this area. Relevant data was thin and not readily to hand. True, the Scottish Education Department does collect annual statistics about the use of educational radio and television but this was thought to be the only field in which extensive national evidence about resources and their use was available. Certainly, other research projects had been and were being carried out but these either were using a relatively small sample or were confined to particular geographic sectors of the country. However, our remit was Scotland and it is, we believe, the first such survey of the national scene.

The project had three main aims. These were:

(i) The collection of information from which a comprehensive report on the official provision of resources for learning in each of the regions could be written. Such an objective view had not at that time been produced. Our report has been published (Hamilton 1980).

(ii) A detailed survey of the views of two hundred teachers in unpromoted posts in order to examine their awareness of the resources that were available to them, the use that they made of these resources and the ways in which they got their information. The survey also examined the use of audio-visual hardware and aspects of the training that these teachers had received. This report is now available (Hamilton 1981).

(iii) An examination of the extent of the development of resources centres in schools. The data for analysis was gathered by a postal questionnaire sent to schools considered to have resources centres. It is this part of the project with which this publication is concerned.

In this book we look at the organisation of resources centres in the schools and we compare our findings with a stated set of criteria in order to identify those patterns which exist. We conclude by analysing the ways in which schools could develop those elements of a resource organisation which they already have in order to create a more effective learning resource support service.

Those readers interested in the other areas of our remit should refer to the documents previously noted. We should also like to mention that SCET has published a series of policy proposals on resources and schools derived from the evidence provided in the three reports which have resulted from this project (SCET 1982).

CHAPTER ONE

1.1 Resources centres are a comparatively new development in our schools and one researcher has reported that no reference to them can be found in British educational journals prior to December 1967 (Featherstone 1973). However, in 1973 when the book "A Resources Centre... is a state of mind" was published and SCET (then the Scottish Film Council) ran a national conference on the subject of the establishment of resources centres in schools, it was possible to identify only six schools that had what we would term resources centres. In subsequent years SCET and its associated body, the Scottish Educational Media Association, did much to promote the concepts of the resources centre, resource organisation and resource based learning. In 1975 an exhibition of materials from regional resources centres was staged in Glasgow, as part of the annual conference of the International Council for Educational Media. This set out in part to show how far the resources centre movement had developed in Scotland. By then, however, it was no longer so easy to know how many schools had organised their resources and according to which patterns. The reports that did appear in the educational press tended to be centred on a small number of schools which were already beginning to suffer from the queues of visitors who came to see how it should be done. Many attempts were being made during the mid-seventies to translate the success of one model school to different architectural and social surroundings. Wild guesses placed the number of centres in the hundreds and by the time that this survey was to commence it was no longer possible to list with any certainty those schools which had a resources centre. We wanted to find out what the true picture of resources centres in Scottish schools was.

1.2 Accordingly, a strategy had to be adopted which would reveal where efforts had been consciously made to set up a centre so that the resource organisation within the school could be examined. Rather than go through the lengthy process of establishing criteria for a resources centre and surveying a large sample of Scottish schools to discover those which matched our standards, it was decided to study those schools which were considered to have a resources centre, whatever was meant by that term. We therefore asked people in senior educational positions within each of the Scottish regions to prepare a list of schools which they believed had this kind of resource organisation. These lists, which were submitted by members of the Directorate, by the Principal Librarians in the School Library Service, by subject advisers, by many of Her Majesty's Inspectorate, by college of education lecturers and by bodies such as the Scottish Curriculum Development Service and SCET, were compared region by region and a final compilation was drawn up containing the names of all the schools sent to us. In other words, if, in one region, six people had named totally different schools, then *all* these schools were later surveyed. It was *not* a case of accepting those places upon which everyone was agreed, rather the opposite. It is conceded that this was perhaps a rather untidy way of going about things. However, there appeared no viable alternative. No list, regional or national, existed. Therefore, one had to be created. Given that obvious limitations prevented an examination of all the schools in Scotland and given that random sampling was likely to provide a lot of information that was of little relevance to our aim of identifying the schools in Scotland with resources centres, this method seemed the most satisfactory.

1.3 152 primary and secondary schools were identified eventually by someone as having a resources centre and although no claim is made that these are all the Scottish schools which have some form of resources centre the figure is sufficiently large to be able to draw some conclusions from our survey.* We circulated our questionnaire to these 152 schools, of which 129 replied. Five of these responses indicated that we had been misinformed and that in their opinion, they did not have a resources centre. The subsequent analysis, therefore, is of the remaining 124 schools.

*One difficulty did arise within the Glasgow Division. Here, for a variety of reasons, no one was able to provide information about which primary schools had resources centres. It was, therefore, decided to distribute the questionnaire to all of Glasgow's 258 primary schools. This was done, not by post, but by the internal delivery system operated by the Division. The replies here numbered 134, i.e., a response of 51.9%. In examining these returns it was obvious that many of the schools could in no way be said to have a resources centre. Some, in fact, did not have central libraries. For this reason, and because what was being surveyed was "schools considered to have resources centres", the replies from the primary schools in the Glasgow Division have been excluded from our discussion here since their inclusion would have affected the analysis of the data in that it would have skewed the findings. However, all the statistical information from the Glasgow primary schools' survey is available to anyone who wishes to examine it and it is hoped to publish a report on this part of our study separately in the near future.

1.4 Our questionnaire, which can be found in Appendix A, consisted of four sections covering the following topics:

(a) The organisation of books within the school.

(b) The organisation of non-book materials within the school and the cataloguing methods used
(c) The availability of both preparation and study areas and, also, reprographic equipment.

(d) The links existing between school resources centres and the knowledge that schools have of the holdings of other centres in their district.

To each of these we have devoted a chapter in this report together with a final section on our conclusions.

1.5 Our data has all been presented in table form, containing both the numbers and percentages. At times the percentages have been adjusted to exclude the "not known" and the "not applicable" categories and where this has been done it is indicated at the foot of the table. It should be noted that on occasions the "not known" category contains quite a high cell figure. It must be pointed out that in more than a few returns answers were omitted for no apparent reason. It may have been that some respondents found the questionnaire hard to follow but since the questionnaire was carefully piloted and no difficulties were at that stage apparent it may be the case that some people did not follow the instructions with sufficient care.

CHAPTER TWO

WHAT IS A RESOURCES CENTRE?

2.1 Many works have been written on resources centres and in virtually every case the writer gives a definition of the term "resources centre" so that the reader is left in the least possible doubt as to what is being discussed. Since this survey took as its starting point the identification of the resources centre by the school, it is not our function to try to argue for one definition over another. Nor is it the function of this report to set up each school as a straw man only to knock it down with some ossified definition wielded as a weapon. However, in order to construct the questionnaire we had first to identify those elements of the resource organisation that we wished to examine.

2.2 Norman Beswick is one of the leading British authorities on the subject and it can hardly be doubted that his writings in the early seventies were largely instrumental in forming the main concepts of what we might today recognise as a resources centre. In 1972 he wrote:

> A resource *includes anything which may be an object of study or stimulus for the pupil, including books, periodicals, newspapers, press cuttings, pictures, diagrams, maps, charts, photocopies and microforms, worksheets, slides, filmstrips, film loops, films, records, audio-tapes, radio and television programmes, videotapes, slide-tape and filmstrip-record combinations, multi-media kits, programmed materials, models, specimens and realia, as well as individuals and objects in the community. Some people would also include zoological and botanical living items. Many of these items will also be of service as accompanying aids for teachers in classrooms.*
>
> A resource collection *is a multiplicity of such items gathered by various people in the school.*
>
> A resource library *is a resource collection organised and indexed for use, much as a book library is organised, but without production facilities.*
>
> A resource centre *is an agency for stimulating the active creation and use of a resource collection, including the six elements of:*
>
> (*a*) *production of home-made resources;*
>
> (*b*) *selection and acquisition of other resources;*
>
> (*c*) *classification and indexing for retrieval;*
>
> (*d*) *storage;*
>
> (*e*) *use, including guidance, lending etc.;*
>
> (*f*) *evaluating and weeding.*

2.3 One might consider that this model, with its strong emphasis on the organisational skills of the librarian, is pragmatic — a *post hoc* analysis of successful centres. It is stated with such assurance by Beswick that some have taken it for dogmatism. On the other hand, one can find in a paper by Basil Lewis a less fundamental, though no less profound, approach as typified by his statement that — "a resources centre is a state of mind". Though it is important to recognise the circumstances in which Lewis made that statement he is pointing to the view that commitment to a resources centre involves not simply organisational changes within the school but also attitudinal changes within the staff for "the existence of a resources centre.... inevitably has broadened the possible angles of approach in almost every part of the curriculum" (Lewis 1973).

2.4 That a "hearts and minds" campaign is essential to establish the proper frame of mind in the teaching staff has often been pointed out (Tucker 1976). But whatever the strategy adopted, it appears that there can be no common goal for there does not seem to be a universal definition of what is meant by a resources centre. It is clear that within the concept of a resources centre there must be resources and that these must be organised in such a way as to make them accessible and retrievable. But there is far more to it than that (Holder and Mitson 1974, Waterhouse 1977). A consideration of the various definitions formulated still leaves a number of issues unclear. At what point does a "library" become a "resources library" for, after all, even Beswick cites books as being resources? At what stage of its development does a "resources library" become a "resources centre"? Beswick seems to maintain that a production facility is a decisive factor but he does not define in any exact terms what is meant by a production facility. To begin to draw demarcation lines

over this aspect will simply drive us back into the rather woolly definitions that exist for the resources centre. One must doubt whether Beswick would argue that the absence of one of his six elements completely disqualifies a putative resources centre, but without definition one finds oneself in the position of the man who, when asked to define an elephant, replied that he couldn't define one but he would certainly recognise it when he saw one. That may be an adequate standpoint from which to discuss an individual resources centre but one needs a more certain foundation on which to base comparison and from which to draw conclusions.

2.5 The purpose of this discussion is not to sport at semantics nor to indulge in academic sniping, rather it is to highlight what we believe to be a major problem within this topic, that what is meant by a "resources centre" is open to question. A library in order to be a library must contain books. But do the six cookery books on a kitchen shelf constitute a library? If not, why not? Should there be six hundred books on the shelf in order for it to be called a library? Or is it that books, regardless of their number, should all be catalogued and classified before the collection is correctly called a library? Similar, but more complex, questions arise with resources centres. When does a collection of resources become a resources centre? If there is an answer to this, as Beswick suggests, is there any agreement on it? The findings of this survey would seem to indicate that within the educational world people's views differ widely and that which Beswick and others mean by a "resources centre" is not what many of the school practitioners understand by the term.

2.6 In this monograph we have avoided taking sides on this issue and have kept our opinions to ourselves. However, a base is needed for comparisons and we have chosen to use Beswick's structure as the model against which to examine the extent of the resource organisation within the schools that responded to the questionnaire. It is these organisational patterns that are likely to produce guidance for further development and the following chapters deal with them in the context of what the schools themselves have described as resources centres.

CHAPTER THREE

THE ORGANISATION OF BOOKS

3.1 Whatever may be our views on learning resources in the broadest sense the book is still one of the major carriers of learning content and is, therefore, an integral part of schooling today. It would be all too easy to forget this in the midst of the enthusiasm for "audio-visual aids". Despite the prediction of Edison in the New York "Dramatic Mirror" in 1913 that "books will soon be obsolete in schools" (Saettler 1968) and similar, though less explicit, prophecies from Marshall McLuhan throughout the 1960s (McLuhan 1962 and 1967), books have maintained a premier position as a learning resource. Taylor has acknowledged that "even the most austere teacher is likely to employ a blackboard and books" (Taylor 1971).

3.2 The ways in which books are organised in our schools clearly affect their use. A school committed to resource based learning would be expected to have a central library (if not a central resources collection). However, the alternative — scattered departmental or class collections — would not necessarily mean that the school did not have a resources centre, for it might be the case that a central catalogue of all the books held within the school existed. This would still allow for the description of a "resources centre" according to the Beswick definition given earlier (see p. 9).

3.3 In this chapter we look at the way the schools organised the book material available to them.

3.4 *Central libraries.* The survey sought to find out how many of the schools had a central library. This could be anything from a purpose-built base in a large secondary school to a series of bookshelves in the cloakroom of a small primary. We were not concerned in this section with size or situation but with existence, for we thought it most unlikely that a school without a central library would have a resources centre.

Table 1. Incidence of central libraries by type of school.

	Primary	Secondary	Total
Schools with central library	58(90.6%)	60(100.0%)	118(95.1%)
Schools without central library	6(9.4%)	0(0.0%)	6(4.9%)
Total	64(51.6%)	60(48.4%)	124(100.0%)

3.5 *Comment.* Of the schools surveyed, 118 had a central library. The six that did not were all primary schools; and they also indicated in response to a later question (Table 7) that they did not have a central catalogue. We can, therefore, conclude that since they did not have a classification and indexing system permitting the easy retrieval of books, they did not have what Beswick and Fothergill would consider to be a resources centre (Beswick 1972, Fothergill 1973). These writers consider that for a school to have a resources centre it must have methods of information retrieval which can be understood or used by both teacher and pupil.

3.6 *Type of central library.* When looking at the schools that did have a central library we wished to know the way in which these were organised since the nature of the library can affect the way in which it is used as a source of resources.

Table 2. Type of central library by type of school.

	Primary	Secondary	Total
Lending library	2(3.5%)	0(0.0%)	2(1.7%)
Reference library	15(26.3%)	3(5.0%)	18(15.4%)
Lending and reference library	40(70.2%)	57(95.0%)	97(82.9%)
Total	57(48.7%)	60(51.3%)	117(100.0%)
Not known	1	0	1
Not applicable	6	0	6
Base	64	60	124

*The percentages in this table have been adjusted and do not include the "not known" and "not applicable" categories.

3.7 *Comment.* It is not surprising to find that the majority of schools in the survey (82.9%) had a central library which operated as both a lending and reference facility. One might question the finding that two primary schools had libraries which were only for the loan of books. This might have been a misreading of the questionnaire for it would seem odd to have a book collection which could not be consulted. The 18 schools which operated only on a reference basis may well have reasons for prohibiting the removal of books from the collection, but this does raise questions about the attitude to the use of books as sources of information. Security is a problem to which schools have to address themselves but at the same time the habit of borrowing resources for private study is one which is promoted by most public and school libraries and one which would undoubtedly be supported by most librarians and those teachers with a belief in resource based learning. What is encouraging about the figures on central libraries in schools which claim to have a resources centre is the degree of uniformity in the provision of a central library that is both a reference and lending collection.

3.8 *Library maintenance.* Having established the level and type of provision of central libraries, we then wanted to find out how these libraries were organised, i.e. by whom they were run.

Table 3. Library maintenance by type of school.

	Primary	Secondary	Total
A chartered or qualified librarian	1(1.8%)	34(56.7%)	35(29.9%)
An unqualified librarian	1(1.8%)	11(18.3%)	12(10.3%)
A teacher-librarian (unqualified)	1(1.8%)	0(0.0%)	1(0.9%)
A promoted member of staff	22(38.6%)	3(5.0%)	25(21.4%)
A non-promoted member of staff	6(10.5%)	1(1.7%)	7(5.9%)
An auxiliary	8(14.0%)	3(5.0%)	11(9.4%)
A chartered or qualified librarian and an auxiliary	0(0.0%)	4(6.7%)	4(3.4%)
A teacher-librarian (unqualified) and an auxiliary	1(1.8%)	0(0.0%)	1(0.9%)
A promoted member of staff and an auxiliary	4(7.0%)	0(0.0%)	4(3.4%)
A group of people	12(21.0%)	4(6.7%)	16(13.7%)
A promoted member of staff and school secretary	1(1.8%)	0(0.0%)	1(0.9%)
Total	57(48.7%)	60(51.3%)	117(100.0%)
Not known	1	0	1
Not applicable	6	0	6
Base	64	60	124

*The percentages in this table have been adjusted and do not include the "not known" and "not applicable" categories.

3.9 *Comment.* The most obvious difference shown by these figures is that which exists between the primary and the secondary schools. Only one primary school had a qualified librarian, whereas thirty-eight secondary schools employed qualified librarians. Such differences arise both from the perceived nature of the collections and from the staffing policy of the education authorities. It is of interest to note that, despite the paucity of specialised support in the primary schools, 47.4% had assigned a promoted member of staff to the task of running the library and in 22.8% an auxiliary had similar responsibility.

3.10 This may illustrate that most of the primary schools have tried to follow the recommendations of the Bullock Report (1975) which stated that "in the primary school one member of staff should have responsibility for carrying out the school's book policy which would reflect a set of objectives understood and accepted by the staff". It would be wrong to assume that this was the reason for the appointment of appropriate staff for the survey did not seek the objectives underpinning the organisation of the book collection.

3.11 The position in secondary schools is markedly different with 63.4% having qualified librarians and a further 18.3% having unqualified librarians. This figure of 81.7% may appear to be high but the Stimpson Report (1976) recommended that a qualified librarian should be appointed to the professional staff of each secondary school with more than 600 pupils and that for those schools with less than 600 a library assistant should be placed in post. These recommendations were made on the basis of the size of the school rather than on the nature of the existing book collection but they do at least take into account the likely needs of the pupils. Our analysis reveals that Stimpson's recommendation has not been taken up by 18.4% of the schools, which rely on auxiliary and staff help to run the library. However, it could be that some of the promoted staff have responsibility for the library written into their contract, which was another recommendation of the Stimpson Committee. Our survey did not attempt to find out whether or not this was so.

3.12 It is worth noting at this point that almost all the writings on the organisation of resources lay great stress on the importance of the institution having a full-time librarian, qualified or unqualified (Beswick 1975). There appears to be little argument over the value of the contribution that the professional librarian makes to the learning activities of the school.

CHAPTER FOUR

THE ORGANISATION OF NON-BOOK MATERIALS AND CATALOGUING METHODS

4.1 Although the book has been, and still is, one of the most important tools of learning in the school, other media are regularly used as supports to learning and also as primary sources of information. Like books these resources are often the shapers and controllers of the learning process, e.g. when programmed learning, individualised learning or modular courses are used. In these cases the role of the teacher is altered from being the repository and transmitter of knowledge and that burden is placed to a greater or lesser degree on the resources themselves. Under these conditions the organisation of the resources in such a way that they can be managed by the professional staff and retrieved accurately by teachers and pupils alike becomes of crucial importance if effective use of the resources is to take place.

4.2 *Resource collections.* It was of great interest to us to discover how the resources were organised in the schools surveyed. In order to obtain comparisons it was decided to treat each medium separately and ask how these were stored in any of three broad categories — centrally, by department, or by individual classroom holdings.

Table 4. Methods of resources collection by type of school.

	Held centrally		Held departmentally		Held by class teachers	
	primary	secondary	primary	secondary	primary	secondary
Audio tapes/cassettes	40(68.8%)	40(66.7%)	6(9.4%)	50(83.3%)	9(14.1%)	9(15.0%)
Diagrams	13(20.3%)	9(15.0%)	1(1.6%)	30(50.0%)	1(1.6%)	22(36.7%)
Film loops	2(3.1%)	13(21.7%)	0(0.0%)	46(76.7%)	0(0.0%)	4(6.7%)
Films	4(6.3%)	4(6.7%)	0(0.0%)	6(10.0%)	0(0.0%)	1(1.7%)
Filmstrips	51(79.7%)	30(50.0%)	1(1.6%)	53(88.3%)	2(3.1%)	7(11.7%)
Games	10(15.6%)	10(16.7%)	11(17.2%)	35(58.3%)	19(29.7%)	9(15.0%)
Maps	53(82.8%)	14(23.3%)	5(7.8%)	53(88.3%)	4(6.3%)	12(20.0%)
Microscope slides	3(4.7%)	1(1.7%)	0(0.0%)	51(85.0%)	0(0.0%)	5(8.3%)
Models	3(4.7%)	5(8.3%)	1(1.6%)	42(70.0%)	3(4.7%)	10(16.7%)
Multi-media kits	29(45.3%)	27(45.0%)	1(1.6%)	34(56.7%)	0(0.0%)	0(0.0%)
Periodicals	25(39.1%)	45(75.0%)	6(9.4%)	26(43.3%)	3(4.7%)	3(5.0%)
Pictures	45(70.3%)	18(30.0%)	6(9.4%)	34(56.7%)	7(10.9%)	10(16.7%)
Postcards	5(7.8%)	5(8.3%)	0(0.0%)	14(23.3%)	2(3.1%)	4(6.7%)
Posters	35(54.7%)	26(43.3%)	6(9.4%)	37(61.7%)	6(9.4%)	10(16.7%)
Specimens	6(9.4%)	4(6.7%)	0(0.0%)	47(78.3%)	2(3.1%)	9(15.0%)
Press cuttings	7(10.9%)	19(31.7%)	1(1.6%)	29(48.3%)	1(1.6%)	12(20.0%)
Radio programmes	26(40.7%)	26(43.3%)	4(6.3%)	31(51.7%)	8(12.7%)	3(5.0%)
Records	40(68.8%)	16(26.7%)	8(12.7%)	54(90.0%)	0(0.0%)	4(6.7%)
Slide-tapes and filmstrip-record combinations	20(31.3%)	29(48.3%)	0(0.0%)	40(66.7%)	1(1.6%)	1(1.7%)
Slides	27(42.2%)	31(51.6%)	0(0.0%)	48(80.0%)	0(0.0%)	8(13.3%)
Teaching machine programmes	3(4.7%)	1(1.7%)	1(1.6%)	13(21.6%)	2(3.1%)	0(0.0%)
Transparencies	14(21.8%)	11(18.3%)	0(0.0%)	55(91.7%)	3(4.7%)	14(23.3%)
TV programmes	16(25.0%)	22(36.7%)	3(4.7%)	18(30.0%)	3(4.7%)	1(1.7%)
Video tapes	12(18.8%)	29(48.3%)	0(0.0%)	23(38.3%)	1(1.6%)	0(0.0%)
Wall charts	38(59.4%)	23(38.3%)	7(10.9%)	49(81.7%)	1(1.6%)	13(13.3%)
Worksheets	25(39.1%)	17(28.3%)	12(18.8%)	53(88.3%)	14(21.8%)	20(33.3%)

*The percentages referred to are percentages of entire population of type of school surveyed.

4.3 *Comment.* When drawing any conclusions from Table 4 a number of factors have to be kept in mind. The survey was concerned with the storage of the media and not with their use. In several cases where high figures appear, such as in the case of "maps" where the primary schools have a high level of central holding and the secondary schools indicate an equally high level of departmental holding, one is tempted to speculate that this results from the use of maps for a variety of purposes across the curriculum by primary teachers whereas in the secondary schools maps are confined almost exclusively to the geography department with occasional use in history and languages. However, the survey did not seek nor receive such information and some of the ensuing comments about use can only be of a speculative nature.

4.4 Another factor that has to be borne in mind is that one would not have expected a high return from the primary schools on departmental holdings because the notion of "departments" is not normally part of the organisational structure of a primary school. However, the distinction was made in the questionnaire in order to cover those instances in which primary schools did indeed have a departmental structure.

4.5 Readers may draw many conclusions from the figures in Table 4 but we will restrict ourselves to comments on specific media.

4.6 *Audio-tapes and cassettes.* Though both primary and secondary schools have central collections (68.8% and 66.7% being high figures when compared to almost all the other media) it is of particular interest that 83.3% of the secondary schools also had departmental holdings. As can be seen from the table there were nine media in which 80% or more of the secondary schools had departmental holdings.

4.7 *Film loops.* These are rarely used in primary schools, possibly because of the need for specialised equipment and also because the materials that are available on the market are not primary-oriented. In the secondaries it is notable that there is a considerably greater holding by department than centrally. The nature of the subject content, which is often within the field of science, may have lead to such materials remaining within the science departments. What the survey does not show, and further work may need to be done on this matter, is whether items such as film loops are being confined to particular departments and whether as a result the information about them is not contained in the central catalogue and made available to the rest of the school.

4.8 *Films.* That as many as ten schools indicated that they held films is perhaps surprising, not because the number is small but because it is done at all. The use of the Scottish Central Film Library and other loan collections is so well established in Scottish schools (Hamilton 1981) that one has to infer that a film held within a school is either one in such great demand as to make its purchase economic or that the film is one that is not generally available through the various film libraries.

4.9 *Filmstrips.* The high returns for filmstrips are indicative not only of their continued popularity but of the divided nature of their organisation into both central and departmental collections. Very similar figures emerge for *slides*, and though the figures are slightly lower there is a proportionately similar pattern for the *slide or filmstrip/sound combinations* and *records*. These returns must be significant if we are to concern ourselves with resource organisation as well as with the concept of the resources centre. The more departments regard such collections as their own, the more there is need for information to be held centrally if any use is to be made of the resources other than by the departments which first purchased or produced the items (Tucker 1979). Where one finds a high level of departmental holdings and very low returns for central collections, e.g. *maps, specimens,* it may seem reasonable to deduce that the nature of the medium has made departmental storage more suitable than the alternative of placing the item in the central library or store.

4.10 *Wallcharts.* Though one might judge that the high figures for departmental holdings of wallcharts might arise from the teachers' perception that these are too specific to their own subject to warrant inclusion in a central base, there is once again a case to be made that the information about these resources should be held centrally. This survey was too blunt an instrument to cross-check all these items but it provides enough evidence of departmental storage to suggest that each school should examine its own organisation to find out if all its resources are in fact catalogued centrally. The value of the central catalogue is that all the teachers in the school can have one place to which reference can be made about all the resources held in the school.

4.11 *Video tapes.* In primary schools, where it is known that there are far fewer video tape players than in secondary schools, it is not surprising to find all the tapes being held centrally, but in secondary schools the fact that there are almost as many departmental collections as central holdings indicates the strength of these two patterns. A different analysis might have shown whether schools chose one or other of the two or whether they operated a mixture. The latter places greater demands on the central information control than either of the systems by themselves.

4.12 *Worksheets.* In the primary returns the figure of 18.8% might not be high for a departmental holding when compared to the secondary schools but it is the highest of the primary departmental returns (whatever is meant by department in the primary school). There is also a high return, 88.3%, for the secondary departments. Unlike some of the earlier examples such as records there appears to be no inherent reason why we should find this medium confined to a single

department. Experience tells us that many different departments do in fact use worksheets and the figure of 88.3% of the secondary schools with departmental holdings of worksheets may mean far more departments are involved throughout the 53 secondary schools than for any other medium. This raises several questions in our minds. Do each of these departments have a record of the worksheets that they use? Is this record available centrally? Do departments know just how many worksheets are being given to the pupils as they move from one department to another? Although this is not the prime function of the organisation of the resources centre it can at least provide the framework which can make this important information more readily available.

4.13 In all these comments on the central and departmental holding of learning materials what to us seems vital is that the school has some system whereby items are catalogued and classified, the catalogue is easily available and the resources sought can be identified and found quickly. Without this kind of efficient organisation it would be difficult to sustain a case for the school having any kind of resources centre.

4.14 *Central collections.* We wished to know how many of the schools surveyed housed their central library and central resources collection together. Our experience leads us to believe that there is a perceived difference between book and non-book items even in the most "progressive" of schools.

Table 5. Incidence of central library and central resources collection by type of school.

	Primary	Secondary	Total
Housed together	24(47.1%)	23(52.3%)	47(49.5%)
Housed separately	27(52.9%)	21(47.7%)	48(50.5%)
Total	51(53.7%)	44(46.3%)	95(100.0%)
Not known	4	5	9
Not applicable	9	11	20
Base	64	60	124

*The percentage figures have been adjusted and do not include the "not known" and "not applicable" categories.

4.15 *Comment.* The differences between the primary and secondary schools are marginal when one studies the responses to our question about whether the central library and the central resources collections are housed together or apart. No reasons were given by those schools which had separate library and resources collections as to why their resources were held this way. There may have been some confusion over the wording of our question in that some schools may have the two collections stored separately but in the same area. It may also be the case in some schools that physical constraints do not permit any further storage of resources in the library space. However, the distinction between the book and non-book (Beswick (1975) refers to the "fossilized terminology of book and non-book") clearly exists, for 50.5% of schools surveyed store them separately. And the way that they are housed reinforces the attitude in both teachers and pupils that they are essentially different things. From this it is possible to infer that different values can be placed upon them whereas leading proponents of integrated resource organisation stress the essential similarities between book and non-book media rather than the difference between them (Shifrin 1973). Though there are those that would argue that the learning resources must be housed together for there to be a resources centre, this is not necessarily so as long as there is a central catalogue controlling the information. The integrationists would certainly argue for a single catalogue even if there is not a single collection.

4.16 One further observation must be made at this juncture. 9 primary schools and 11 secondary schools stated that this question was inapplicable. No reasons were given but one must assume that an answer was not forthcoming because either the school did not have a central library and/or it did not have a central resources collection. All the 6 schools which had indicated that they did not have a central library stated that they could not answer this question. There were a further 9 schools which did not respond in any fashion to this question nor to the succeeding query (which is related to this issue). It seems reasonable in their cases to assume that this was either because they too did not have a central resources collection and/or because they chose deliberately not to indicate a reply (which may have been because they did not have a central resources collection). The existence of a central resources collection, of course, is not crucial to the concept of a resources centre — a point we have made previously.

4.17 *Maintenance of resources collection.* Having established the geographical links between the central library and the central resources collection we wanted to find out whether they were run by the same person or, if not, by whom.

Table 6. Resources collection maintenance by type of school.

		Primary	Secondary	Total
The person(s) who run(s) the library	(1)	25(51.0%)	25(56.8%)	51(53.7%)
A promoted member of staff	(2)	15(29.4%)	4(9.1%)	19(20.0%)
An auxiliary	(3)	5(9.8%)	6(13.6%)	11(11.6%)
A group of people	(4)	3(5.9%)	4(9.1%)	7(7.4%)
The school secretary	(5)	0(0.0%)	1(2.3%)	1(1.0%)
(1) and (2)		0(0.0%)	2(4.5%)	2(2.1%)
(1) and (3)		1(1.9%)	0(0.0%)	1(1.0%)
(1) and (4)		0(0.0%)	1(2.3%)	1(1.0%)
(2) and (3)		1(1.9%)	1(2.3%)	2(2.1%)
Total		51(53.7%)	44(46.3%)	95(100.0%)
Not known		4	5	9
Not applicable		9	11	20
Base		64	60	124

*The percentage figures have been adjusted in this table and do not include the "not known" and "not applicable" categories.

4.18 *Comment.* In the majority of cases, 53.7%, the resources collection is maintained by the person who also runs the library. Without being able to infer anything from these particular figures one can assume that there is a better chance of co-ordination of the book and non-book resources when they are the responsibility of a single person or administrative team. It is worth noting that in 29.4% of the primary schools the resources collection is administered by a promoted teacher who is not the same person who runs the library. In 13.6% of the secondaries this function is undertaken by an auxiliary who likewise does not run the library. The relationships between those running the resources collection and those running the libraries is not known but could clearly be a crucial factor in the interlinking of these two sets of resources.

4.19 It should be noted that there is a great similarity between the responses in Table 5 indicating the number of schools where the central library and the central resources collections were housed together and the figures here showing that the two collections were organised by the same person. It would appear that where the central resources collection was separate from the central library, another teacher, group or ancillary was responsible for its organisation. This leads one to deduce that in these schools the two types of learning material are seen as significantly different. It may well be argued by the schools that this split of responsibilities has arisen because of the necessary physical separation of the two collections. But if one distinguishes between the responsibility for organisation and the need for guardianship one must raise the question why a physical differentiation should be equated with an administrative differentiation. This can only further instill in the minds of the users the belief that the two sources of learning are different and carry a different value.

4.20 *Central catalogue.* Almost all the writers on this subject agree that a central catalogue of some form is essential for there to be any effective resource organisation and it is inconceivable that there could be a realistic claim to having a resources centre without the existence of a central catalogue. If one can accept that one of the functions of a resources centre is to assist in the effective use of resources by making known to the users what resources exist then there must be some form of co-ordinated information control. If one does not know what resources are available, how can one make use of them? Central catalogues can provide that knowledge if properly organised.

Table 7. Central catalogue by type of school.

	Primary	Secondary	Total
Schools with central catalogue	42(65.6%)	31(51.7%)	73(58.9%)
Schools without central catalogue	22(34.4%)	29(48.3%)	51(41.1%)
Total	64(51.6%)	60(48.4%)	124(100.0%)

4.21 *Comment.* The first thing to note from this table is that 51 schools (41.1%) in the survey did not have a central catalogue or list of all the resources available within the school and, therefore, cannot be said to have a resources centre by almost any criteria — and certainly not by the criteria established by Beswick. It is possible that some, and perhaps all, have departmental or class catalogues but we have no evidence of this. It would in any case only raise the possibility of *departmental* resources centres and this survey is concerned with *school* resources centres.

Although we state that 51 of these schools do not have resources centres they may well have some, or even all, of the other elements that constitute such a centre. Earlier we said that the organisation of resources may be more important than the existence of a physical centre, but at the same time one cannot assume that all the parts which make up this whole are of equal importance. There may be cases in which one element is weak or missing and it might still be possible to argue that there is sufficient organisation to assert that there is a resources centre. However, it is our contention that without a central catalogue there cannot be adequate organisation. It is a necessary, but not a sufficient, condition. It may be the bed-rock of a resources library or even a simple resources collection but without it there cannot be a resources centre.

4.22 *Format of central catalogue.* Having noted that 73 of our schools kept a central catalogue we proceeded to ask about the physical format of these catalogues.

Table 8. Format of central catalogue by type of school.

	Primary	Secondary	Total
Cards	20(47.6%)	19(61.3%)	39(53.4%)
Sheaf	9(21.4%)	4(12.9%)	13(17.8%)
Printed out book	3(7.1%)	1(3.2%)	4(5.5%)
Optical coincidence cards	1(2.4%)	0(0.0%)	1(1.4%)
Subject lists	2(4.8%)	2(6.5%)	4(5.5%)
Cards and sheaf	1(2.4%)	1(3.2%)	2(2.7%)
Cards and printed out book	4(9.5%)	1(3.2%)	5(6.8%)
Cards and optical coincidence cards	0(0.0%)	1(3.2%)	1(1.4%)
Cards and subject lists	2(4.8%)	0(0.0%)	2(2.7%)
Cards, edge punched cards and optical coincidence cards	0(0.0%)	1(3.2%)	1(1.4%)
Sheaf and printed out book	0(0.0%)	1(3.2%)	1(1.4%)
Total	42(57.5%)	31(42.5%)	73(100.0%)
Not applicable	22	29	51
Base	64	60	124

*The percentage figures in this table have been adjusted and do not include the "not known" and "not applicable" categories.

4.23 *Comment.* It is noticeable that card and sheaf catalogues far outnumber all the other forms. It might be thought by the 11.0% of schools which had soiely books or lists that they had the advantage of being able to distribute these around the staff rather than have them confined to one place but such systems have distinct disadvantages with anything but a small collection. Card and sheaf catalogues can be easily altered and up-dated. It is also much more simple to set up systems of cross-referencing through added entries with card and sheaf catalogues than it is with printed lists since any addition either means altering a page, or possibly the whole catalogue, or sacrificing the ordered list, be it alphabetical or numerical.

4.24 It is particularly worth noting that only one primary and two secondaries made any use of optical co-incidence cards (OCCI). Post-coordinate indexing was being held out as the solution for the control of school collections in the early seventies, partly, one suspects, because of the successful operation of this system in one or two of the best known resources centres in Britain. Subsequent experience has tended to show that OCCI and other such methods work well with a relatively homogeneous collection within a narrow subject area. Some schools have begun to find problems when attempting to make the system cover all the media in all the subjects. The need to operate within a controlled vocabulary and then follow this with the physical act of drilling holes accurately in a card has resulted in each entry taking far longer to input than with any of the more conventional methods.

4.25 *Type of catalogue.* Having established the physical form of the catalogue we then requested precise details of the retrieval systems used. We were particularly interested to find out if any one system was predominantly popular. The case for uniformity can always seem convincing particularly with teachers, who do not have any training in librarianship, moving from school to school and, therefore, using many different libraries in their working lifetime.

Table 9. Central catalogue by type of school

	Primary	Secondary	Total
A catalogue classified by Dewey (1)	18(42.8%)	15(50.0%)	33(45.8%)
A catalogue classified by another scheme (2)	3(7.1%)	0(0.0%)	3(4.2%)
A dictionary catalogue (3)	8(19.0%)	4(13.3%)	12(16.7%)
An alphabetical catalogue (4)	1(2.4%)	0(0.0%)	1(1.4%)
Key word indexed (5)	0(0.0%)	2(6.7%)	2(2.8%)
An optical coincidence scheme (6)	0(0.0%)	0(0.0%)	0(0.0%)
Subject lists (7)	5(11.9%)	3(10.0%)	8(11.1%)
(1) and (2)	2(4.8%)	0(0.0%)	2(2.8%)
(1) and (3)	2(4.8%)	0(0.0%)	2(2.8%)
(1) and (4)	0(0.0%)	2(6.7%)	2(2.8%)
(1) and (5)	1(2.4%)	2(6.7%)	3(4.2%)
(1) and (6)	1(2.4%)	1(3.3%)	2(2.8%)
(1) and (7)	1(2.4%)	0(0.0%)	1(1.4%)
(1), (3) and (7)	0(0.0%)	1(3.3%)	1(1.4%)
Total	42(58.3%)	30(41.7%)	72(100.0%)
Not known	0	1	1
Not applicable	22	29	51
Base	64	60	124

4.26 *Comment.* The Bullock Report (1975) has indicated that the resources centre is effective in proportion to the ease with which pupils can themselves use it and that this implies a retrieval system that can be easily understood. The information tabled above refers to 1 classification scheme, 2 types of catalogue and 3 types of subject index. Most libraries (*not* most school libraries) have a catalogue, a subject index and a classification scheme. The wide use of Dewey illustrated above (45.8% of schools used it) is not at all surprising, in that it is easy to understand and use; and since classification is by subject arrangement, it can be used with non-book materials as well as print items. The second most popular category is the dictionary catalogue; it is used by 16.7% of schools. This entails an entry under author, title and subject for each item in the one A–Z sequence, so that 3 entries at least for each item in stock could result in a very large catalogue if it was kept on cards. It could also be difficult for a pupil to understand the filing, if the entries kept "hopping" from authors to subjects to titles. The only other form which is used by more than 3 schools is the subject lists, which 8 schools, 11.1%, said they had. Presumably it is just a list of items within a subject area, which is rather an inflexible approach, as the lists would then require constant updating as the stock is added to. The combination categories supposedly indicate that Dewey is used for books and the edge punched cards, OCCI etc. for software. There is no indication as to whether in the 3 schools which have edge punched cards and OCCI, the pupils also use the index. There is little doubt that although both systems have advantages, it would be easier for both teacher and pupil to use an alphabetical catalogue or dictionary. It would also be cheaper. The only definite conclusions that can be drawn are to note the continued popularity of the Dewey Decimal Classification Scheme in schools and also to record the wide range of differing library methods in our schools.

CHAPTER FIVE

PREPARATION AND REPROGRAPHIC AREAS

5.1 Inherent in the notion of the resources centre must be the use of the resources as part of the learning process. Resource based learning requires a large amount of material for the learner to explore (Fothergill 1973). Though we would always urge any teacher to check existing materials before rushing to create new ones, we would also recognise that many circumstances can combine to make it necessary either to adapt materials prepared by others or to create anew for the specific local requirements of the learners. In either case there is a need for space and facilities for preparation and reproduction. This adds another element which we consider to be essential to a resources centre. The placing of these areas in relation to the resources collections will be discussed later but, whether the reader wishes to pursue the notion of the resources centre as a physical entity or as an organisational concept, preparation and reprographic areas are essential if the "centre" is to be anything other than an organised collection.

5.2 *Preparation areas.* It has been said that dedicated commitment to the concept of a resources centre implies the conviction that the traditional form of presentation of learning ("written demonstration of knowledge to be submitted to the teachers' red pencil") should lose prime importance and that work-benches, easels, model-making spaces and tape-recording booths should all move into the pupils' learning space or the pupils move out to them. Resources centres are concerned not simply with displaying the mass-produced resources of commercial conglomerates, but with helping one teacher or one pupil to prepare something which will be of value to more than just the originator as a learning resource (Garnett 1972).

5.3 Accordingly we sought to find out how many of the schools had established an area which was specifically set aside for the preparation of resources.

Table 10. Incidence of schools with preparation areas by type of school.

	Primary	Secondary	Total
Schools with preparation areas	35(56.5%)	33(58.9%)	68(57.6%)
Schools without preparation areas	27(43.5%)	23(41.1%)	50(42.4%)
Total	62(52.5%)	56(47.5%)	118(100.0%)
Not known	2	4	6
Base	64	60	124

*The percentage figures in this table have been adjusted and do not include the "not known" responses.

5.4 *Comment.* 57.6% of the schools surveyed indicated that they had a room (or part of a room) set aside for the production of resources. We did not enquire whether this room was made available to both staff and pupils. It was noticeable that there was little difference here between primary and secondary schools. It is also worth observing that the 42.4% of the schools which did not have a preparation area specifically set aside may very well be involved in the creation of learning materials. The survey did not ask whether preparation was carried out by staff at home or in their classrooms. It may be the case that no room can be found for this purpose but we would argue that the lack of visible support to the teacher through the provision of this facility is likely to discourage initiative. If the school thinks itself, or is thought, to have a resources centre and then makes no specific preparation provision then further questions have to be asked about its organisational policy. Our survey did not enter this area of debate and schools without a preparation area should perhaps think again about what they expect from the teaching staff.

5.5 *Location of preparation area.* We then sought to discover the position of the preparation area in relation to those elements of the resources centre already identified, in the belief that the physical position might have psychological importance as well as practical convenience. (See Table 11.)

5.6 *Comment.* As it happens these figures show that there is quite a wide variation from school to school. There is no real difference between the primary and secondary responses, and the highest cell figures in both cases refer to the "other areas" category. Though this had not been specified in the questionnaire the majority of the respondents indicated that this was either a staff room or a store room, and, whilst neither of these can be ideal as preparation areas, this does indicate that even those schools which have not managed to provide such a space closely related to the resources area have recognised that a space in which resources can be prepared is important.

Table 11. Position of preparation area by type of school.

	Primary	Secondary	Total
Beside/next door to the library	3(9.7%)	2(6.5%)	5(8.1%)
Beside/next door to the central resources collection	4(12.9%)	3(9.7%)	7(11.3%)
Beside/next door to the library/ resources collection	4(12.9%)	6(19.4%)	10(16.1%)
Part of the library	0(0.0%)	1(3.2%)	1(1.6%)
Part of the resources collection	6(19.4%)	5(16.1%)	11(17.7%)
Part of the library/resources collection	6(19.4%)	4(12.9%)	10(16.1%)
Other areas	8(25.8%)	10(32.3%)	18(29.0%)
Total	31(50.0%)	31(50.0%)	62(100.0%)
Not known	6	6	12
Not applicable	27	23	50
Base	64	60	124

*The percentage figures in this table have been adjusted and do not include the "not known" and "not applicable" categories.

5.7 It can be argued that there is the greatest logic in placing the preparation area as close as possible to the resources area, without interfering with its operation, since the creation of new learning materials should be carried out in relation to materials that already exist and new materials should be integrated into the existing collections. In strictly practical terms a properly equipped and operated preparation area could be physically separated from the resources collection as long as there was a carefully controlled intellectual link between the two. In reality it is much easier for the relationship to be perceived if the two functions are seen as being physically interdependent. It is, therefore, interesting to note that if one discounts the differences between "library" and "resources collection" for the purposes of this section then we can see that 71.0% of the respondents indicated that they had placed the preparation area near to the collection and it can be safely assumed that they have appreciated the need for the student or teacher to have materials at hand when developing media for learning or teaching. This proximity is something that planners might bear in mind when any new centres are being designed. In our survey we did not seek to find out why preparation areas had been so placed and we are aware that there are many variables in such planning decisions, particularly when attempts are being made to introduce these facilities into existing buildings.

5.8 Despite this apparently high figure of 71.0% of the schools with preparation areas close to the collection of learning resources, one must still remark on the fact that 62 out of the 124 schools made no provision or could provide no information. Under those circumstances one can but question how teachers are expected to provide materials for learning without the proper tools or preparation areas. It is not as though we can assume that they either create no resources at all or resort to a traditional mode of "chalk and talk" since they are all schools with some claim to having a resources centre and, therefore, to having some sort of commitment to resource based learning.

5.9 *Reprographic activities.* As has been observed earlier, a great deal of the learning material used in school is print-based despite many of the extravagant claims that have been made over the years for the efficacy of non-book media. Because of this we sought information on the provision of reprographic facilities within the schools.

5.10 Once material has been drafted, edited, rewritten and finally agreed upon by all concerned, the problem of print reproduction arises. The Bullock Report (1975) acknowledged this when it stated that the resources centre must be served by reprographic facilities, which can make available at short notice quantities of newspaper cuttings, children's writings, photographs, facsimiles of documents, pamphlets, prints. Beswick (1977) has commented in similar vein, wryly reporting that "five hundred years late, teachers caught up with Gutenberg".

5.11 One does not have to look far in any school to see that massive amounts of print reproduction are taking place. There has been a marked increase in the use of the worksheet. Modern copying equipment, combined with the rising price of commercially published texts, has encouraged teachers to adopt existing work and to adapt it to their own use. This survey did not set out to find out what the quality of materials was or how well they were used in teaching, though these are matters which should be of concern to all education authorities. Equally, it was not the function of this survey to raise questions about copyright within the context of reprography in schools, but action since this survey was started must give rise to some anxiety. Any concern for the legality of reprography in schools might usefully be allied to a concern for the educational quality of the work being copied.

5.12 *Reprographic areas.* In considering the provision of reprographic facilities we first determined how many schools had a specifically designated reprographic area.

Table 12. Incidence of schools with reprographic area by type of school.

	Primary	Secondary	Total
Schools with reprographic area	41(73.2%)	56(100.0%)	97(86.6%)
Schools without reprographic area	15(26.8%)	0(0.0%)	15(13.4%)
Total	56(50.0%)	56(50.0%)	112(100.0%)
Not known	8	4	12
Base	64	60	124

*The percentage figures in this table have been adjusted and do not include the "not known" responses.

5.13 *Comment.* It should come as no surprise to find that all the secondary schools and the majority of the primary schools surveyed had a specific provision of space for reprography. It can even be regarded as encouraging that only fifteen of the primary schools had no such area, for it would be a most unusual school in which materials were not being created which would require duplication for use by numbers of pupils. Even if we could imagine a situation in which no new learning materials were being produced there would still be a great many managerial items, notices, examination papers and so on to be produced. It is because of this that it would be fair to speculate that at least some of the fifteen schools, which stated that they did not have a reprographic area, cope with these printing needs through the services of the school office.

5.14 *Placement of reprographic facilities.* The next question produced a set of answers which show more clearly the ways in which schools have related the reprographics facility to their library/resources area.

Table 13. Position of room set aside for reprographic activities by type of school.

	Primary	Secondary	Total
The same room as that used for the preparation of resources	13(33.3%)	11(20.4%)	24(25.8%)
Next door to the room used for the preparation of home-made resources	0(0.0%)	1(1.9%)	1(1.1%)
Beside/next door to the library	2(5.1%)	4(7.4%)	6(6.5%)
Beside/next door to the central resources collection	0(0.0%)	3(5.6%)	3(3.2%)
Beside/next door to the library/resources collection	3(7.7%)	1(1.9%)	4(4.3%)
Part of the library	1(2.6%)	0(0.0%)	1(1.1%)
Part of the resources collection	2(5.1%)	1(1.9%)	3(3.2%)
Part of the library/resources collection	3(7.7%)	2(3.7%)	5(5.4%)
Other areas	15(38.5%)	31(57.4%)	46(49.5%)
Total	39(41.9%)	54(58.1%)	93(100.0%)
Not known	10	6	16
Not applicable	15	0	15
Base	64	60	124

*The percentage figures in this table have been adjusted and do not include the "not known" and "not applicable" categories.

5.15 *Comment.* A quarter of the schools had been able to integrate the reprographics and preparation areas and it does not take much thought to see that there is a great deal of sense in putting together the facility to produce and reproduce learning materials. Though these figures indicate that 61.5% of the primary schools and 42.6% of the secondary schools had arranged the reprographics area close to or inside the library/resources collection a number of questions have to be considered. Because there is still a large proportion of the schools that have the reprographic work done "elsewhere" and the numbers responding in each category is very small, is it possible to infer that there are good reasons for *not* having the two areas adjacent to each other? Aside from the possibility of physical constraint, which the survey did not at this point attempt to discover, it might also be that reprographic equipment is considered too noisy to be placed close to the library/resources area. Here is one of the many cases in which practical issues may have to override theoretical niceties, even where a school starts with a *tabula rasa*. It may also be legitimate to pose the question as to whether in deciding where reprographic equipment should be sited the prior existence of similar equipment in the school office might condition the possible responses.

5.16 It is particularly interesting to note that 38.5% of the primary schools and 57.4% of the secondary schools said that reprographics work was done elsewhere and that as many as 33 of the 46 indicating "other areas" stated that the school office was where such work was done. Mere separation of this work from the library/resources area does not in any way indicate conclusively that they are not conceptually linked and one has to acknowledge that employing the school office to reproduce learning materials may be making the most effective use of available machinery. But, at the same time, one has to ask whether the office is the most suitable place. The office staff cannot give resources work highest priority since it is unlikely to figure as such in their job descriptions and school administrative work must come first. Also, there are likely to be problems of staff access to machines. There appears to be some evidence that the amount of print-based resources produced in schools is rising although the authors are not able to quantify this. Whether or not this is true, schools which become involved in the reproduction of materials are likely to become aware that one doesn't know how much one needed something until one has it. The ability of the school office to meet the needs of resource based learning may be rapidly exhausted. It ought to be a matter of concern that such a high proportion of schools still rely on the school office performing a function that can at the best be secondary, to provide such an important support to learning.

5.17 *Reprography staff.* In relation to these figures, which reveal little about the provision that does exist, the next table provides information which may be of more value — about the people who are responsible for the reproduction of the resources.

Table 14. Manner of material reproduction by type of school.

		Primary	Secondary	Total
Teachers doing it themselves	(1)	7(10.9%)	2(3.4%)	9(7.4%)
School auxiliaries	(2)	12(18.8%)	12(20.7%)	24(19.7%)
School office staff	(3)	3(4.7%)	5(8.6%)	8(6.6%)
Other methods	(4)	3(4.7%)	0(0.0%)	3(2.5%)
(1) and (2)		17(26.6%)	7(12.1%)	24(19.7%)
(1) and (3)		12(18.8%)	8(13.8%)	20(16.4%)
(1) and (2) and (3)		4(6.3%)	21(36.2%)	25(20.5%)
(1) and (3) and (4)		1(1.6%)	2(3.4%)	3(2.5%)
(2) and (3)		5(7.8%)	1(1.7%)	6(4.9%)
Total		64(52.5%)	58(47.5%)	122(100.0%)
Not known		0	2	2
Base		64	60	124

*The percentage figures in this table have been adjusted and do not include the "not known" category.

5.18 *Comment.* Though this table tells us nothing more about the physical linking of the reproduction area to the library/resources area there are a number of conclusions that can be drawn. Firstly, in 63.8 of the schools surveyed, the teachers have a choice in the ways in which their material can be reproduced — it does not appear to be mandatory that they must reproduce the work themselves or that it can only be done by the school office staff. Secondly, although 15 primary schools indicated earlier that they did not have a room (or part of a room) set aside for reprographic activities (Table 12), they clearly can reproduce their material, or have it reproduced, somewhere in the school. Thirdly, in 41 of the schools, 33.5%, teachers appear to be unable to make materials without the assistance of someone else. A strict application of the Beswick criteria might here indicate that these schools did not meet the conditions by which it could be said they have a resources centre. Yet, although in these cases a second party appears to be necessarily involved in the process, this does not mean that teachers (or pupils) in these schools cannot create or develop learning materials. Because of this we should question the rigid application of the criterion of reproduction of the materials by the teacher, for the fourth conclusion that we can draw is that in not one case did reproduction of materials not take place. That is to say that, by one means or another, all the schools did manage some form of duplication of resources. What this survey could not determine was the quality of this reproduction. We could not differentiate between learning resources, handouts from the school office, or rough notes for pupils.

5.19 *The method of material reproduction.* Some indication of the potential print quality of the resources can be deduced from a knowledge of the type of machines that are used. The previous question indicated nothing about the quality of the resources and it must be admitted that the questions asked in our survey did not seek information about pedagogical quality. It is always possible to conceive of a school resources centre that meets all the criteria that we have set out yet is filled with educationally deplorable materials — conceivable but undesirable. However, our concern here must be with organisational matters and it was for that reason that we next sought data on the method of reproduction of resources.

Table 15. Reproduction methods by type of school.

	Primary	Secondary	Total
Spirit duplicator	63(98.4%)	56(94.9%)	119(96.7%)
Ink duplicator	55(85.9%)	58(98.3%)	113(91.7%)
Off-set litho	0(0.0%)	24(40.7%)	24(19.5%)
Semi-wet photocopier	2(3.1%)	16(27.1%)	18(14.6%)
Heat copier	47(73.4%)	52(88.1%)	99(80.5%)
3M type "Dual Spectrum" copier	0(0.0%)	8(13.6%)	8(6.5%)
Electrostatic copier (plain paper)	1(1.6%)	10(16.9%)	11(8.9%)
Electrostatic copier (coated paper)	1(1.6%)	16(27.1%)	17(13.8%)
Different kind of photocopier	2(3.1%)	17(28.8%)	19(15.4%)
Typewriter (carbon paper copies)	59(92.2%)	51(86.4%)	110(89.4%)
Electronic stencil cutter	3(4.7%)	4(6.8%)	7(5.7%)
Other methods	1(1.6%)	6(10.2%)	7(5.7%)

*There was one secondary school which did not answer this question. The percentages have been correspondingly adjusted. The percentages referred to are percentages of entire population of type of school surveyed.

5.20 *Comment.* These figures show quite clearly the extent to which the spirit duplicator and the ink duplicator dominate the field. The heat copier, which is used in 80.5% of the schools is more likely to be used either for very short run duplication or more likely for the creation of masters, e.g. ink stencils, which can then be used for making multiple copies. It is interesting to consider these returns for what they reveal about the organisation of school resources centres. If we confine ourselves for a while to the question of multiple duplication of resources there are really four types of machine to be looked at: the spirit duplicator, the ink duplicator, the photocopier of one type or another and the off-set litho. The figures above, when considered in relation to capital and running costs reveal a lot about the development of school resources centres. Few, if any, schools have had the good fortune to develop their centres completely from scratch with a sufficiently large budget to make the best long term decisions, and it is, therefore, not surprising to find that most of the schools are equipped with machines that require a low capital outlay. What is not clear from our survey is the extent to which those responsible have taken into account the high running costs of these same machines. If we take it as axiomatic that resource based learning and the running of resources centres implies the duplication of resources for learning then we cannot with any ease of conscience ignore the question of cost effectiveness.

5.21 The question of reprographic costs has been explored in many other publications (Tucker 1979) and it is not necessary to repeat all the arguments here, but a brief summary would serve to illuminate the issue. In general, the low cost spirit duplicator is good for reproducing hand-made resources and many teachers feel confident handling the technology required. However, the copies are not cheap for short runs and have a tendency to fade. Also, the masters do not last for any length of time and cannot be used successfully for long print runs. Ink duplicators are better for runs of 100 or more and give a much better cost-per-copy. But the production of mixed text and illustration is difficult unless the school also has access to a rotary scanner. Further the machinery appears to many to be more difficult to operate though in reality it is cleaner and easier than many a spirit duplicator, even when one considers the use of different colours. Off-set litho is somewhat more complex to use though there are many models that are designed specifically for office staff; and these machines do give a high quality result and a low cost-per-copy. Perhaps the easiest to work are the photocopiers and the best of the plain paper copiers do give a high quality result.

5.22 The off-set litho and the photocopier, in contrast with spirit and ink duplicators, are high cost units to buy. Decision makers, therefore, have to be able to work out the amortisation of costs against expected print runs to get the most cost effective solutions to the equipping of resources centres. Photocopiers sometimes give rise to a further factor which distorts any analysis of their use. If the costing of copies is not carefully linked to the work being copied it is very difficult to ascertain whether these machines are being effectively employed. Whilst costings should be the subject of other studies it is clear from the figures above that, although all the schools surveyed have means of reproducing resources in print form, it is far from certain — given that we have no statistics indicating the annual numbers of sheets printed — that the most cost effective methods are being used. Reproduction machinery may be an essential part of the concept of a resources centre but cost effectiveness should also be taken into account.

5.23 There is one further factor which comes into play when considering reprography in schools, and that is the way in which costing is allocated. Our survey did not attempt to analyse this element of the organisation but the authors realise that any further work in this area should give consideration to this question. If we accept that correct decision-making in equipping the resources centre must depend, in the case of reprographic machinery, upon having all the information that can

affect that decision then the number of copies made by the school will be crucial. A number of studies, such as LASSET and a survey carried out during the negotiation between Scottish interests and the Publishers' Association with regard to copyright, revealed that large amounts of copying go on in institutions without those responsible being able to ascribe costs to particular departments. In simple terms this suggests that there is a greater tendency to use a copier if one's own department is not going to have to pay the cost of the copies. In some cases where costs were borne centrally, the absence of any records of what had been copied meant not only that no count would be kept but also no evaluation was possible.

5.24 *Study carrels/work bays.* The question was next asked about the existence and position of study carrels and work bays. The introduction of carrels into schools, implying as it does the notion of individual study, is a relatively recent innovation (along with the resources centre) although the notion of the quiet area for secluded study within the library has existed for centuries. Given that pupils will be allowed individual or small group access to learning resources then the existence of the study carrel or the work bay becomes an important component of the resources centre. In the early days of the resources centre movement carrels were modelled on the known library versions. More recent trends in the use of equipment, including the video recorder/player, have tended to suggest that the space required by the learner might be greater than had earlier been allowed. The new British Code of Practice, being drawn up at the time of writing, is proposing areas of up to 1.5 sq.m. per learner depending on the type of equipment being used.

5.25 The following table shows the details of carrels and work bays in schools.

Table 16. Incidence of study carrels/work bays by type of school.

	Primary	Secondary	Total
Schools with carrels	9(14.1%)	34(56.7%)	43(34.7%)
Schools without carrels	55(85.9%)	26(43.3%)	81(65.3%)
Total	64(51.6%)	60(48.4%)	124(100.0%)

5.26 *Comment.* As can be seen, very few primary schools, 14.1%, have carrels or work bays specifically designated as such. This is not surprising since the nature of primary school work tends to foster group, rather than individual, activity. This is not to suggest that primary schools do not have need of such spaces. The use of audio-visual equipment for individual or group work usually requires a modicum of separation from the rest of the pupils. Primary teachers have found a multitude of ways of coping with this need, e.g. through the use of headphones and small screens, not all of which have resulted in a demand for specially constructed spaces.

5.27 *Location of study carrels/work bays.* The higher number in the secondary schools mirrors the greater level of independent and individualised work to be found. However, when one looks at the location of these carrels a number of interesting questions arise.

Table 17. Position of study carrels/work bays by type of school.

	Primary	Secondary	Total
In the library	3(33.3%)	15(44.1%)	18(41.9%)
In the resources collection	1(11.1%)	6(17.6%)	7(16.3%)
In the library/resources collection	1(11.1%)	11(32.4%)	12(27.9%)
In other areas	4(44.4%)	2(5.9%)	6(14.0%)
Total	9(20.9%)	34(79.1%)	43(100.0%)
Not applicable	55	26	81
Base	64	60	124

*The percentages in this table have been adjusted and do not include the "not applicable" category.

5.28 *Comment.* It can be seen from these figures that, although the cell sizes are not very large, the majority of the carrels are either in the library, 41.9%, or in the library/resources area, 27.9%, giving a total of 69.8%. This may indicate that there has been a pattern carried over from the former notion of the separated reading space in the traditional library. Having noted the change in equipment in recent years it is perhaps worth raising the question as to whether the carrels, or perhaps more flexible work bays, should no longer be sited in the library/resources area itself. It might be argued that the normal atmosphere of the library is not conducive to the use of many learning media in that they produce noise and bright images which are distracting to anyone else who happens to be able to see them. Equally, there are many proponents of open plan working

areas who would demonstrate that pupils can work quite happily amid a host of apparently distracting influences. The use of headphones and small viewing screens can eliminate many of the distractors but not in all circumstances. The advent of the keyboard and the visual display unit coupled to the microcomputer are not going to make the situation any easier. In future there might be a case for a compromise between proximity to the store of learning materials and the most suitable siting of the work areas to create the least disturbance to others.

CHAPTER SIX

RESOURCES COLLECTION MATERIAL AND LINKS BETWEEN CENTRES

6.1 Having established a number of facts about the organisation and management of the school resources centres it was then thought necessary to examine the content of the collections. We wished to determine whether the resource based learning movement was something that was representative of education as a whole or whether it had grown no further than a select group of subjects which have intrinsic reasons for their prominence in the use of learning resources. Further we wished to determine whether those who did, and do, make use of resources use only those within the school collection or whether their enthusiasm moves them to seek what they need furth of the school.

6.2 This section covers a general area including an examination of the subjects best covered in the resources collections, the use made of the school resources collection by those within and without the school, and the links the school resources centres have with other resources centres.

6.3 *Resources collection material (primary schools).* Primaries clearly do not have the sharp subject divisions which exist in the secondaries. Nevertheless, there *are* distinct subject areas which are covered in the primary schools and these are represented in the resources collections. It has to be remembered, of course, that the school may not have a central resources collection but may have one or two departmental collections. Table 18 gives details of the areas which are considered to have most material, and Table 19 gives the reasons mentioned for that particular subject having the most material in the resources collection.

Table 18. Subject area best covered by resources collection (primary schools).

	Number	%
Language/Arts	15	23.8%
Mathematics	6	9.5%
Environmental Studies	30	47.6%
Music/Art	3	4.8%
Language/Arts and Environmental Studies	9	14.3%
Total	63	100.0%
Not known	1	—
Base	64	—

*The percentage figures in this table have been adjusted and do not include the "not known" category.

6.4 *Comment.* It should be noted that these rather stark figures result from the schools being asked to name the subject that had the most material. There was no system of ranking the subjects which might have resulted in less contrast in the numbers. However, we have no reason to believe that the leading subject would have been any the less dramatically ahead of the rest.

Table 19. Reasons for subject area having most material in resources collection (primary schools).

	Number	%
This subject area, and the methods associated with the teaching of it, make the use of resources especially appropriate	51	85.0%
The teacher in charge of this subject area is very enthusiastic about audio-visual aids and equipment	2	3.3%
The school has a tradition of multi-media use in this subject area	2	3.3%
Other factors	5	8.3%
Total	60	100.0%
Not known	4	—
Base	64	—

*The percentage figures in this table have been adjusted and do not include the "not known" category.

6.5 *Comment.* It is obvious that Language/Arts and Environmental Studies, which account for 85.7% of the responses, are far better represented in the primary schools than the other two subject areas. There is also little doubt that most of the primaries consider that these areas, and the methods associated with the teaching of them, make the use of resources especially appropriate. It is now conventionally argued that these subjects are inherently more visual and that there is a greater need to convey the learning material as a visual form. The popularity of the primary school project has tended to increase the use of pictorial representation and has perhaps not encouraged the incorporation of subjects like maths in this form. Whilst there is no way that we could know for a fact that commercial pressures have a part to play in this pattern, a cursory glance at commercial catalogues will show that the preponderence of materials available to primary schools falls into the pattern shown in Table 18. Determining whether the commercial companies are responding to teacher demand or leading it was not a purpose of the survey.

6.6 *Resources collection material (secondary schools).* In the secondary schools the picture was somewhat different in that, although the inter-disciplinary study has been adopted by some schools, the majority adhere to the traditional subject divisions. It should be remembered that these findings are from a time before the Munn and Dunning proposals had begun to have any marked effect on the structure of the curriculum. Accepting that the subject divisions present an apparently different picture to the primary schools there is a marked similarity of distribution across the subject areas, although the reasons for the subject area having most materials differ in some interesting ways.

Table 20. Subject area best covered by resources collection (secondary schools).

	Number	%
English	12	25.0%
Modern Languages	2	4.2%
Science	6	12.5%
Social Subjects	20	41.7%
English and Social Subjects	4	8.3%
Others	1	2.1%
No particular locus	3	6.3%
Total	48	100.0%
Not known	12	—
Base	60	—

*The percentage figures have been adjusted and do not include the "not known" category.

Table 21. Reasons for subject area having most material in resources collection (secondary schools).

	Number	%
This subject area, and the methods associated with the teaching of it, making the use of resources especially appropriate	18	37.5%
The teacher in charge of this subject area is very enthusiastic about audio-visual aids and equipment	20	41.7%
This subject area has more money at its disposal	1	2.1%
The school has a tradition of multi-media use in this subject area	2	4.2%
Many pupils take this subject area	3	6.3%
The materials can be used in other subject areas	4	8.3%
Total	48	100.0%
Not known	12	—
Base	60	—

*The percentages in this table have been adjusted and do not include the "not known" category.

6.7 *Comment.* English and Social Subjects between them account for 75% of the responses to the question which subject had the most materials. In many respects this can be said to correspond to the Language/Arts and Environmental Studies areas of the primary school. Again, a glance at the commercial catalogues will confirm that there is a preponderence of material related to geography and social studies. It also seems to be a regular occurrence, though we have no figure for this, that geography teachers tend to build up large collections of slides to illustrate their lessons — a sort of proof that the overseas holiday also involved some work!

6.8 It is, therefore, very surprising to find that in the secondary school, where a great deal of work has been done on the integration of media into certain subjects, the most prominent reason for a high level of media provision was not that the methodologies employed encouraged the use of media but that there was an enthusiastic teacher.

6.9 In secondary schools there are more promoted teachers than in the primaries and, where they have responsibility for a subject area, they consequently have a major say in the way that the subject is taught and the resources that are provided. At the same time, however, we should remember that the answers to this particular question are perhaps more subjective than to many of the others. Here the respondents are giving us their perceptions. It may not be a completely accurate representation of resource provision and the reasons for that provision, but it does portray the way that things are *seen* to be.

6.10 Whatever the case may be, this table suggests that there is a relatively low awareness in secondary schools of the relationship between the use of resources and the methodologies implicit in their use. This could well be the subject of further serious study.

6.11 *Use of resources collections.* Almost all of the writers on the development of resources centres have stressed the notion that such centres should be open to teachers and pupils alike in the course of teaching and learning (Bullock Report 1975; Stimpson Report 1976). It was, therefore, considered important to find out how much use was being made of the resources centres that we surveyed.

Table 22. Internal use of resources collection by type of school.

		Primary	Secondary	Total
Pupils under the supervision of a teacher	(1)	20(33.3%)	15(29.4%)	35(31.5%)
Pupils not under the supervision of a teacher	(2)	4(6.6%)	1(2.0%)	5(4.5%)
Teachers only	(3)	14(23.3%)	13(25.4%)	27(24.3%)
(1) and (2)		16(26.7%)	14(27.4%)	30(27.0%)
(1) and (3)		2(3.3%)	1(2.0%)	3(2.7%)
(1) and (2) and (3)		4(6.6%)	7(13.7%)	11(9.9%)
Total		60(54.1%)	51(45.9%)	111(100.0%)
Not known		4	9	13
Base		64	60	124

*The percentage figures in this table have been adjusted and do not include the "not known" category.

6.12 *Comment.* The significant, and disappointing, figure in *internal use* is that in only 41.4% of the schools are pupils allowed to use the resources collection whilst not under the supervision of a teacher — and in a sizeable proportion of these schools this was a part of a pattern which included directly supervised use. Thus, in the majority of the schools surveyed, the principle propounded by the theoreticians that pupils should have ready and easy access to the learning resources has either been rejected or not yet achieved.

6.13 Immediately, we must state that we recognise that there might well be perfectly sound *practical* reasons for this state of affairs, not least of which might be security. But we would argue that independent access to resources is one of the fundamental components of resource based learning. We recognise that this survey did not set out to find out which schools had a commitment to resource based learning, but it is reasonable to expect some positive correlation between the setting up of a resources centre and the growth of resource based learning. That this assumption could be wrong is shown by the somewhat disturbing figure of 24.3% of the schools surveyed (which were said to have a resources centre) in which only the teachers had access to the resources.

6.14 By Beswick's criteria these schools cannot be said to have a resources centre, although clearly they have an organised resources collection. It may be that the system of providing resources to the teaching staff has had a beneficial effect on the quality of the teaching — we did not test for that — but is it cost effective to have a resources collection which apparently does not allow direct access by the learner? (See Table 23.)

6.15 *Comment.* These figures referring to *external use* illustrate quite dramatically how isolated the majority of schools resources centres are. It is perhaps not surprising, although a little sad, to see that 90.0% of the primary schools had no interchange of materials with other schools. They may consider they have just a sufficiency for their own needs. What is disappointing is that

Table 23. External use of resources collection material by type of school.

	Primary	Secondary	Total
No other schools	54(90.0%)	37(72.6%)	91(82.0%)
Other primary schools	5(8.3%)	5(9.8%)	10(9.0%)
Other secondary schools	0(0.0%)	5(9.8%)	5(4.5%)
Other primary and secondary schools	1(1.7%)	4(7.8%)	5(4.5%)
Total	60(54.1%)	51(45.9%)	111(100.0%)
Not known	4	9	13
Base	64	60	124

*The percentage figures in this table have been adjusted and do not include the "not known" category.

such a high percentage of the secondary schools, 72.6%, seem also to exist as islands. The system of "feeder-primary" relationships seems to have filtered through into the resources centre in only five of the schools and only a similar number had any exchange with other secondary schools. In these circumstances, when few, if any, of the schools seem to be part of a network of materials exchange, one must ask questions about the effectiveness of the system that these schools have worked so hard to create. Without any kind of network it is reasonable to assume that each of these schools has built up a collection which will meet, in some degree, the curricular needs. If we allow for the vagaries of the personal drive of the people involved, and if we allow for the possibility that some of the resources are being used to their maximum efficiency for most of the time, is it not reasonable to assume that there is still a proportion of *all* these collections lying idle, duplicated in the majority of the centres? Does it not also seem reasonable to ask why, as these centres have developed within a common educational system, controlled by education authorities, there has not been established a proper network of centres? Such a network would be able to bring many benefits to the system — not least of which would be the interchange of sufficient information to enable centres to find available materials rather than feel that they have to hold everything themselves.

6.16 *Delivery methods.* We proceeded to enquire how those schools whose resources collections were used by other schools distributed their material to the borrowers.

Table 24. Delivery methods of resources by type of school.

		Primary	Secondary	Total
Delivery/collection by individual teachers	(1)	6(100.0%)	9(64.3%)	15(75.0%)
Post Office facilities	(2)	0(0.0%)	1(5.0%)	1(5.0%)
(1) and (2)		0(0.0%)	1(5.0%)	1(5.0%)
(1) and the Education Authority's van		0(0.0%)	2(10.0%)	2(10.0%)
(1), (2) and other methods		0(0.0%)	1(5.0%)	1(5.0%)
Total		6(30.0%)	14(70.0%)	20(100.0%)
Not known		4	9	13
Not applicable		54	37	91
Base		64	60	124

*The percentage figures in this table have been adjusted and do not include the "not known" and "not applicable" categories.

6.17 *Comment.* These figures are very small, which is something only to be expected given the returns indicated in the previous table. It is evident that it is up to individual teachers to deliver or collect from other schools. Only three schools use Post Office facilities, all of them secondaries situated in rural areas; one of these three also "employs" pupils to act as resources postmen.

6.18 *Catalogues.* The teachers in a school which has a central resources collection, or some departmental collections, should be kept fully informed of the contents of those collections if they are to make effective use of them. One way that has been found to be worthwhile is by issuing a catalogue (or list) of the holdings and distributing it both within the school and also to the feeder primaries, in the case of a secondary school, and the local or regional resources centre. An alternative which is sometimes adopted is to make it the responsibility of each teacher to keep themselves up to date with the materials that are in the collection. There appear to be a number of disadvantages in the latter option since one can never check quite what is known nor can one find a complete list of the holdings. Another drawback of leaving it up to individual teachers to acquaint themselves is that knowledge cannot easily be passed to others outside the school. Thus, not only has a management tool been lost but also a major stimulus to use by other people.

6.19 Whilst advocating the preparation and distribution of catalogues and lists we are very aware of the effort required to compile a useful catalogue of resources. Whichever method is chosen (see Tables 8 and 9) it is certain that this is a labour intensive activity. Nevertheless, there are ways in which all the users of resources within an institution can assist in the process of information collection through the use of proformas for co-operative cataloguing (Tucker 1979). Such a sharing of effort leaves the librarian with the job of classifying each entry and ensuring the correct cross-reference — a job in which he can use his professional skills to the full.

Table 25. Incidence of catalogue issues by type of school.

	Primary	Secondary	Total
Schools issuing catalogues	26(48.1%)	20(43.5%)	46(46.0%)
Schools not issuing catalogues	28(51.9%)	26(56.5%)	54(54.0%)
Total	54(54.0%)	46(46.0%)	100(100.0%)
Not known	10	14	24
Base	64	60	124

*The percentage figures in this table have been adjusted and do not include the "not known" category.

6.20 *Comment.* 46.0% of the schools surveyed have issued a catalogue. The above table shows very little difference in the responses between the primary and secondary schools. One might have expected that more primary schools would have compiled a list of their holdings since the collections tend to be smaller and thus easier to catalogue. But who in the primary school is there to undertake such an onerous task? In the absence of a qualified librarian (Table 3 reveals that only one primary school had such a person) who is to provide the direction and stimulus for such an exercise? One would have to rely on in-service training of the senior staff in the primary school for them to recognise the importance of the task and have the necessary skills.

6.21 On the other hand, one might have expected that with at least 83% of the secondary schools having a qualified or unqualified librarian (Table 3) and since 51.7% of the secondaries stated that they had a central catalogue of all their holdings (Table 7) the response from these schools might have been better. But it is already clear that the secondary schools tend to have much larger collections. It is also safe to say that the subject requirements of the secondary school would require a more sophisticated form of cataloguing or listing to ensure more accurate retrieval. Therefore, the task in the secondary is so much harder. Also, the library staff there have other duties and, even where there is support from teaching colleagues, the job will take a long time — months rather than days.

6.22 *Catalogue distribution.* We next sought to find out what patterns of distribution had been adopted by those schools which had prepared and issued a catalogue.

Table 26. Distribution of resources centre catalogues by type of school.

	Primary	Secondary	Total
Every member of the school staff (1)	24(92.3%)	9(45.0%)	33(71.7%)
(1) and Area Resources Centre	1(3.8%)	1(5.0%)	2(4.3%)
(1) and Divisional/Regional Resources Centre	0(0.0%)	1(5.0%)	1(2.2%)
(1) and your Education Authority	0(0.0%)	2(10.0%)	2(4.3%)
(1) and other *central* bodies	0(0.0%)	1(5.0%)	1(2.2%)
(1), local primary schools, local secondary schools and Divisional/Regional Resources Centre	1(3.8%)	0(0.0%)	1(2.2%)
(1), local primary schools and Divisional/Regional Resources Centre	0(0.0%)	1(5.0%)	1(2.2%)
Other interested bodies	0(0.0%)	4(20.0%)	4(8.7%)
Local primary and secondary schools	0(0.0%)	1(5.0%)	1(2.2%)
Total	26(56.5%)	20(43.5%)	46(100.0%)
Not known	10	14	24
Not applicable	28	26	54
Base	64	60	124

*The percentage figures in this table have been adjusted and do not include the "not known" and "not applicable" categories.

6.23 *Comment.* It has to be noted here that in the preceeding table the majority of the cell figures are so small as to make any generalisation from them unsound. There are some observations, nonetheless, that can be made. Only two primary schools prepare a list and send it outwith the school. On the other hand, eleven of the twenty secondary schools which had such a catalogue

distribute them to external bodies. It would be of interest to known what happens to these lists. Do they lie on a shelf gathering dust? Or do they, through the mechanisms of the regional and local resources centres, become part of the lifeblood of a resources network? This survey gives no answer.

6.24 We then wanted to find out how many of the schools received catalogues from other commercial and/or educational bodies.

Table 27. Incidence of schools receiving catalogues from other bodies by type of school.

	Primary	Secondary	Total
Schools receiving such catalogues	55(87.3%)	39(67.2%)	94(77.7%)
Schools not receiving such catalogues	8(12.7%)	19(32.8%)	27(22.3%)
Total	63(52.1%)	58(47.1%)	121(100.0%)
Not known	1	2	3
Base	64	60	124

*The percentage figures in this table have been adjusted and do not include the "not known" category.

6.25 *Comment.* Although 77.7% of the schools indicated that they received catalogues from other bodies, this still leaves almost one in every four schools stating that they did not receive such information. The position of the person who actually replied to our questionnaire varied from school to school, but as far as we could tell from the returns it seemed always to be someone in a promoted post, the librarian or the person in charge of the library. It would be reasonable, therefore, to assume that these people would have seen any catalogue which had come into the school. However, it is possible that since we asked about catalogues the respondents did not consider a "list" of holdings as being a catalogue. This might explain the negative replies, which represent a reasonably high proportion. At the same time, we cannot assert that catalogues are not being seen in these schools. Nevertheless, unless one accepts the interpretation that 22.3% of the respondents did not equate a "list" with a "catalogue", it could lead one to believe that, in almost 1 in 4 of the schools we surveyed, the teachers with some measure of responsibility for resource organisation (or the librarians where such a post exists) do not receive catalogues from any other educational bodies. If these people do not receive these communications, what chance is there of the ordinary teacher being aware of the resources listed in them?

6.26 Looking then at those schools which did receive catalogues from other educational sources we wanted to determine whence these came.

Table 28. Details of catalogues received by type of school.

	Primary	Secondary	Total
Area Resources Centre	7(12.7%)	3(7.7%)	10(10.6%)
Divisional/Regional Resources Centre	39(70.9%)	27(69.2%)	66(70.2%)
Other bodies	0(0.0%)	4(10.3%)	4(4.3%)
Area and Divisional/Regional Resources Centre	5(9.1%)	3(7.7%)	8(8.5%)
Area Resources Centre and other bodies	2(3.6%)	0(0.0%)	2(2.1%)
Divisional/Regional Resources Centre and other bodies	2(3.6%)	2(5.1%)	4(4.3%)
Total	55(58.5%)	39(41.5%)	94(100.0%)
Not known	1	2	3
Not applicable	8	19	27
Base	64	60	124

*The percentage figures in this table have been adjusted and do not include the "not known" and "not applicable" categories.

6.27 *Comment.* It is clear from these findings that 83.0% of the schools surveyed received catalogues from their Divisional/Regional Resources Centre. This figure might well have been higher were it not for the fact that some of the schools were in areas which did not have such centres. Such high returns might be pleasing to the education authorities but the low responses for the "other bodies" can bring little comfort to those that were actually cited to us. These included the Scottish Central Film Library, the Scottish Curriculum Development Service and some museums. One thing is clear from this particular table. Schools are not being provided with catalogues from educational sources other than the authorities' resources centres.

CHAPTER SEVEN

ANALYSIS AND SUMMARY

7.1 *Introduction.* It will be obvious to anyone who has read the preceeding chapters that, although we surveyed 152 schools, all nominated to us as having a resources centre, and received back 124 completed questionnaires, the number of schools within this sample which can really be said to have a resources centre is considerably smaller.

7.2 Given the returns that have been made there seem two ways of analysing our data. Either, one can study the information against the yardstick of the criteria determined by an expert as being necessary in order to say that a resources centre exists within a school; and, thereafter, one can apply these standards to the schools surveyed and eliminate those which do not meet them, thereby highlighting a number of model schools which have all the attributes that the expert (in our case, Beswick) has identified. Or, alternatively, one can accept that not all the schools in our study conform to a given model and then consider the characteristics which they do exhibit in order to see if a more practical model can be constructed against which to measure our findings.

7.3 *First strategy — Beswick's model.* To take the first approach, that of the Beswick model, we can say that a school which does not have a central catalogue of all its resources lacks the most fundamental element of a resources centre. Beswick does not consider it vital that there *be* a central resources collection, rather that the school has a central catalogue or list to which any teacher can make reference in order to find out the resources available and their location.

7.4 If a school can be said to have a resources centre, which is in some measure a commitment to resource based learning, the effective use and management of those resources can only be based on controlled information. Without the basic retrieval system of a central catalogue a school cannot be said to have a resources centre.

7.5 Also contained within the Beswick notion of a resources centre is the provision of preparation areas and reprographic facilities. Resources centres are concerned not only with librarianship but also with the production of learning resources. Therefore, in order to be said to have a resources centre by this model, a school must provide an area for the production and reproduction of locally made resources. It might be argued that such an area need not be integral to the concept of a resources centre in that enthusiastic teachers can, and often do, use their own classrooms for this purpose (or even make the materials at home in their own time). However, having a resources centre involves a commitment to a certain way of thinking and this, in turn, means the creation of an area within the school to which teachers or pupils or groups can go to find the materials necessary for them to transfer their ideas into learning resources. Thus, those schools which do not have such a work base cannot be regarded as having a resources centre.

7.6 Reprographic facilities are equally important but it was not always easy to analyse the data from our survey. Within our paradigm reprographic machinery is necessary to any resources centre but all the schools already have this kind of equipment and it was impossible in our questionnaire to establish whether these facilities were there for reasons other than to aid school administration. However, it was clear that in all schools reprographic facilities were on hand and could be used by teachers, although perhaps not in the manner nor to the extent that one envisages in an efficiently organised school resources centre.

7.7 *Conclusions from Beswick's model.* We therefore find that if we follow through a rigorous application of Beswick's criteria for saying a school has a resources centre and so exclude those schools which do not have a central catalogue or a preparation area, we are left with 31 schools, i.e. 17 primaries and 14 secondaries. If we look more closely at the responses from these 31 schools, it can be argued that only 13 of them, i.e. 7 primaries and 6 secondaries, have resources centres within the full terms of our definition in that they also distribute lists of their holdings to the teachers in the school and allow the resources to be used by pupils not under the direct supervision of a teacher. Of the remaining 18 schools, 8 (6 primary and 2 secondary) issue a catalogue to their staff but do not allow pupils unattended access; a further 7 (4 primaries and 3 secondaries) do not issue lists of resources and allow only supervised access; and the final 3 schools, all secondaries, do not issue lists but do allow the pupils to use the resources centre without teacher supervision.

7.8 We have thus arrived at a position in which the use of the set of criteria which are widely accepted as being the characteristics which underpin the concept of a resources centre lead us to

query the claims of the majority of the schools surveyed that they have a resources centre. We would argue that the procedure adopted, that of a questionnaire based on commonly-agreed criteria, has been carefully and objectively followed. But it leaves us questioning the value of such a rigorous application of our criteria. We have discounted a school as having a resources centre if it did not have a central catalogue, if it had no preparation areas, if it did not distribute its catalogue or if it did not allow unsupervised access to the centre. We recognise that what we have so far done could be regarded as setting up straw men only to knock them down again. However, the equal application of our criteria, without any weighting, has the virtue of pointing up the gaps and weaknesses within the organisational structures in the schools surveyed.

7.9 We acknowledge that it is quite possible that a school which is excluded by the above procedure has in fact both an efficient and effective resource organisation which amply supports the curricular work of the school. As we stated at the beginning of our report, a commitment to a resources centre ideally reflects a commitment to resource based learning. But the existence of elements of a resources centre, e.g. a central catalogue, do not *per se* mean that the school is committed to resource based learning. We do not live in a world governed by ideals. There are many factors, both social and physical, which reduce adherence to Beswick's view of what makes up a resources centre. Nevertheless, it is very evident from our survey that, if the criteria generally accepted as indicating the existence of a resources centre in a school are applied to our findings, few schools in Scotland can be said to have a resources centre in the full meaning of that term.

7.10 Before looking at the survey returns from our second standpoint it is worth noting that our questionnaire referred only to the manner of the organisation of the resources centre and not to its efficiency or effectiveness. Some of the schools which can be said by even the strictest of criteria to have a resources centre may neither produce much material of their own nor integrate the use of learning resources into the curriculum. On the other hand, there may be many schools not identified as having resources centres which are producing resources for use not only within their own walls but also for distribution to other schools. However, having said that, we believe from our replies that most schools tend to function within their own boundaries and neither seek resources from other schools nor circulate news of their own (Tables 23 and 26). This parochialism may have many causes, including lack of staff time, but it can be seen immediately that this lack of contact between schools can result in a serious loss to the educational process.

7.11 *Second strategy — independent analysis.* We propose now to study our results from a different angle. Instead of examining the findings against established criteria we shall look at our data to see if a pattern is discernible which might indicate what is meant by practitioners when they say that their school has a resources centre. In other words, we are following the Wittgensteinian principle that the meaning of a phrase, here "resources centre", will lie in the way that it is used. Where possible we have organised our comments in a thematic format.

7.12 *Central libraries.* Central libraries were common to almost all our schools. 118 of the 124 schools surveyed had a central library. The remaining 6 cannot be of further concern to us since they also indicated that they had no catalogue of books or resources and it is difficult to see how they can have any kind of resource organisation. That so many schools had a library meant that at least they were used to placing their central resources under some form of control. The leap from a book library to a non-book collection is not so great, especially once all media are regarded as carriers of knowledge/content whose physical form happens to differ (Table 1).

7.13 *Library personnel.* Only about half of the secondary schools surveyed had a qualified librarian and there were few other forms of help in the library. This highlights one of the fundamental problems in resources centres and in resource organisation in general. If there is nobody to control the resources and provide the information about them the chances of effective use are significantly reduced. Education authorities should today reflect on the vast sums of money which are being spent on resources without the concomitant expenditure on people to make the purchase of the resources worthwhile. Whilst one might argue that none of Beswick's criteria are sufficient conditions for the existence of a resources centre a good case can be made for the presence of somebody to organise the resources as being a necessary condition (Table 3).

7.14 *Resources collection personnel.* We found that about half the schools had the resources collection organised by the same person who was responsible for the library. This still leaves a large number of schools which have further exacerbated the ideological separation between books and learning resources. It is the view of the authors that such a separation weakens the chance that learning resources will be regarded as useful carriers of knowledge (in the way that books are seen to be) and that any organisational dichotomy further reduces the chances of the learner retrieving appropriate resources for particular learning needs. Whether or not the school has a resources centre is less important than the matching of appropriate resource with specified needs (Table 6).

7.15 *Central catalogues.* More than half the schools surveyed had a central catalogue. That is a positive statement and central to the cases for both resources centres and for resource organisation of other forms. What is disturbing is that 41% of the schools who thought that they had a resources centre did *not* have a central catalogue. We do not need to labour the point here. That which is not known cannot be managed successfully (Table 7).

7.16 *Preparation areas.* Once again, just over half of our schools had a room (or a part of a room) set aside for the preparation of resources. Although preparation areas are often seen as essential components of a resources centre, they are also needed by schools which do not have a resources centre but still have teachers who want to produce their own learning materials (Table 10).

7.17 It is clear that where preparation areas are provided there is a general pattern of links with the resources centre or the library. The recognition of the need for such areas is a recent development and it is encouraging to see the efforts that have been made. But, once again, we must stress that the most significant figure from these tables is that there are so many schools without such a provision (Table 11).

7.18 *Reprographic areas.* Almost nine out of ten schools had their own reprographic areas (Table 12). However, what is less encouraging is that very often such reprographic facilities are set up initially for the normal school administration. We note that more than 50% of the secondary schools and 38.5% of the primary schools indicated that the reprographics area is not part of the resources provision (Table 13). Whilst one can appreciate the absolute necessity of having reprographic equipment at the service of the school administration there are two points which we wish to make. Firstly, if the idea of the creation of learning resources is successfully assimilated by the teaching staff, teachers are likely to place a demand on the available equipment far beyond its planned capacity. Secondly, since the needs of school administration have to take precedence, there are likely to be fewer opportunities for staff to use the equipment than would be the case in a dedicated unit. One can only speculate as to what this does to teacher enthusiasm. One must, therefore, question the long-term effectiveness of using the "office" reprography. It might be better to analyse the reprographic needs of the school in terms of the creation of learning resources. Then, by installing the right equipment, there would be a chance of getting the most appropriate economies, quality of finished result, reinforced enthusiasm on the part of teachers — and possibly better responses from pupils to higher quality materials.

7.19 *Study carrels.* Few primary schools have carrels or work bays but this is not surprising and need in no way alter their approach to resource organisation, given that the pattern of learning in primaries tends to be different. The higher proportion of carrels found in the secondary schools (56.7%) might easily lead us to believe that more than half the schools had at least envisaged the use of learning materials by individuals (Tables 16 and 17). Whether this is for genuinely individualised study is not an issue for this document. It does mean, however, that one mode of using learning materials, a mode which is at the heart of resource based learning, has been made possible. This is pleasing for it will allow for a greater flexibility among the staff in developing alternative methods of learning, should they so desire.

7.20 *Use of resources collections.* We found that, although most of the schools allowed pupil access to the learning resources under one method or another, nearly a quarter of the schools had collections which were for staff use only. Without knowledge of these resources and how they are used one cannot comment directly other than to raise a question over the resources for learning the pupils actually used (Table 22).

7.21 It was also disappointing to find so many schools — more than 4 out of 5 — neither sharing nor exchanging resources. There seems no doubt that there is either extensive and unnecessary duplication of provision or a remarkable lack of initiative in seeking appropriate resources for identified learning needs (Table 23).

7.22 *Catalogues.* Our finding that less than half the schools issued a catalogue indicates a serious gap in the resource organisation of those which did not (Table 25). Without information there cannot be effective management or use. It is difficult to understand how teachers or pupils know what is available. Nor can such an omission further these schools' claim to have a resources centre.

7.23 *Conclusion from independent analysis.* We undertook this second analysis of our data because a rigid application of our previous criteria for saying a school had a resources centre resulted in the apparently severe judgement that only 13 (or possibly 31) schools could be said to have a resources centre out of the 124 who replied to our questionnaire. We thought that this

systematic, and somewhat inflexible, approach might be unfair to schools which had at least made some effort to establish a sort of resource organisation. Accordingly, we reviewed the same evidence to see if it revealed elements of an approach to resources centre organisation different to that of the theorists. Unfortunately, this strategy has proved to be little more encouraging than the first. Our analysis reveals that, although almost all of our schools have some, i.e. more than one, of the characteristics of a resources centre, very few have a complete set. One is, therefore, left with the thought that, maybe, some of these characteristics are essential to the concept of a resources centre while others are tangential, e.g. it is crucial to have a central catalogue but not crucial to have study carrels. Such thinking, of course, is Beswick revisited.

7.24 It appears that any attempt at drawing a model for a resource organisation within a school leads us back to something very close to what Beswick described as the elements which make up a resources centre. We may have to have a new set of criteria with weighting applied. It may not be essential within a view of organised resources that the resource be centralised but there must be centralised information. It may not be essential that there be preparation areas and reprographic facilities physically adjacent to the collection of resources but that they must exist within the school is certain. That the school should not exist in some sort of bubble, hermetically sealed off from other sources of information and materials, is incontrovertible if we are to make effective use of the resources that exist within the education system.

7.25 *Summary.* Perhaps our concern in this monograph with the identification of resources centres has served only to obscure what is important to the teachers and pupils. That is, that whether we have a resources centre or whether we have organised resources, the teachers and the pupils must know what is in the school, both the hardware and the software. Further, they must be able to get this information easily and accurately. Finally, they should be able to use the system swiftly to get the resource to match their particular learning need. If such a resource is not available there should be a fair chance that it can be borrowed or made. Without all these elements of organisation we are effectively negating much of the value of the investment that has been made in learning resources in the last few years.

7.26 Our most important finding in this survey — regardless of the criteria we have employed to determine when a school has a resources centre — is that we must doubt the extensive claims which have been made for the number of resources centres in Scottish schools. Their number is few. Resources centres in schools simply do not exist in the abundance that was presumed prior to our work. Further, we feel obliged to question the value of much of the resource organisation which presently exists in our schools. Too many gaps exist therein. These gaps, however, are not unbridgeable. It is clear that there is today a structure which could form the basis of a strong resource organisation in tomorrow's schools. But this structure requires to be developed and strengthened before we can talk with truth and pride of the resource organisation in Scottish primary and secondary education.

7.27 How might this change take place? It is always easy to shift the burden of responsibility on to the shoulders of the education authorities, but in the long run they alone have the authority and resources necessary to organise the in-service training, the provision of hardware and software support, and the bureaucratic enthusiasm to create this new world. The "good works" of individual teachers may affect local schools but the national picture can only be altered by national figures. Only they can make the kind of changes of which we are talking and which we believe necessary following our study of resources centres in Scottish schools.

BIBLIOGRAPHY

BESWICK, Norman — "Organising Resources" — (London: Heinemann Educational Books, 1975).
BESWICK, Norman — "Resource Based Learning" — (London: Heinemann Educational, 1977).
BESWICK, Norman — "School Resource Centres" — (London: Evans/Methuen Educational, 1972) Schools Council Working Paper 43.
BSI — "Code of Practice for the Design of Learning Spaces" (in preparation).
BULLOCK — The Bullock Report, see "A Language for Life".

FEATHERSTONE, Philip in Malcolm A H (ed) — "A Resources Centre is...a State of Mind" — (Glasgow: Scottish Educational Film Association, 1973).
FOTHERGILL, Richard — "Resources Based Learning: A Radical Alternative" in Malcolm, A H (ed) "A Resources Centre...is a State of Mind" (Glasgow: Scottish Educational Film Association, 1973).
FOTHERGILL, Richard "Resources Centres in Colleges of Education" — (London: National Council for Educational Technology, 1973).

GARNETT, Emmaline — "Area Resource Centres, an experiment" — (London: Arnold, 1972).

HAMILTON, David D — "Regional Resources for Scottish Schools" — (Glasgow: SCET, 1980).
HAMILTON, David D — "Teachers and Resources: the views of 200 Unpromoted Teachers" — (Glasgow: SCET, 1981).
HOLDER, M L and MITSON, R— "Resources Centres" — (London: Methuen Educational, 1974).
"A Language for Life," A Report by a Committee of Enquiry appointed by the Secretary of State for Education and Science under the Chairmanship of Sir Allan Bullock FBA — (London: HMSO, 1975).

LEWIS, Basil — "Resources Centre at St Peter's C E Primary School, Tunbridge Wells" in Malcolm A H (ed) — "A Resources Centre is...a State of Mind" — (Glasgow: Scottish Educational Film Association, 1973).
"Non-Teaching Staff in Secondary Schools. Youth and Community Workers, Librarians, Instructors" — A Report of a Working Party appointed by the Secretary of State for Scotland — (Edinburgh: HMSO, 1976) [Known as the Stimpson Report].
"Resources Liaison Project — Report by the Scottish Council for Educational Technology to the Scottish Education Authorities" — (Glasgow: SCET, 1982).

SAETTLER, P — "A History of Instructional Technology" — (New York: McGraw Hill, 1968).
SHIFRIN, Malcolm — "Information in the School Library" — (London: Bingley, 1973).
STIMPSON — The Stimpson Report, see "Non-Teaching Staff in Secondary Schools."

TAYLOR, L C — "Resources for Learning" — (Harmondsworth: Penguin Books, 1971).
TUCKER, Richard N — "The Setting Up of a Resources Centre: 2 — Planning and Staffing" — (Glasgow: Scottish Educational Film Association, 1976).
TUCKER, Richard N — "The Organisation and Management of Educational Technology" — (London: Croom Helm, 1979).

WATERHOUSE, Philip — "Why Set Up a Resources Centre?" — (Educational Broadcasting International, March 1977).

APPENDIX A

SCOTTISH COUNCIL FOR EDUCATIONAL TECHNOLOGY

CONFIDENTIAL

NATIONAL SURVEY OF RESOURCES CENTRES IN SCOTTISH PRIMARY AND SECONDARY SCHOOLS

Where a list of numbers has been provided for alternative answers to a question PLEASE TICK THE BOX(ES) NEXT TO THE NUMBER THAT APPLIES TO YOU. Wherever your reply does not fit into one of the answers please add explanatory notes.

SECTION ONE

1. The school has a central library

YES	1	
NO	2	

If your school does not have a central library, please miss out the next three questions and go on to question 5.

2. The school library is

a lending library	1	
a reference library	2	
a library offering both lending and reference facilities	3	

3. The opening hours of the school library are

Monday .....

Tuesday .....

Wednesday .....

Thursday .....

Friday .....

4. The school library is run by, (i.e., maintained by),

a chartered or qualified librarian	1	
an unqualified librarian	2	
a teacher-librarian (qualified)	3	
a teacher-librarian (unqualified)	4	
a promoted member of staff	5	
a non-promoted member of staff	6	
an auxiliary	7	
a group of people (please specify)	8	
other (please specify)	9	

SECTION TWO

5. The school keeps a collection of

		held centrally	held departmentally	held by class teachers
audio-tapes/ cassettes	1			
diagrams	2			
film loops	3			
films	4			
filmstrips	5			
games	6			
maps	7			
microscope slides	8			
models	9			
multi-media kits	10			
periodicals	11			
pictures	12			
postcards	13			
posters	14			

		held centrally	held departmentally	held by class teachers
specimens	15			
press cuttings	16			
radio programmes	17			
records	18			
slide-tapes and filmstrip record combinations	19			
slides	20			
teaching machine programmes	21			
transparencies	22			
TV programmes	23			
video tapes	24			
wall charts	25			
worksheets	26			
other resources (please specify)	27			

6. If you have a central library **and** a central resources collection they are

housed together	1	
housed separately	2	

7. Are there special factors which make difficult a central resources collection in your school? e.g., annexes, split site? (please specify)

.....

.....

.....

.....

.....

If your school does not have a central resources collection, please miss out the next question and go on to question 9.

8. The resources collection is run by, (i.e., maintained by).

the person(s) who run(s) the library	1	
a chartered or qualified librarian	2	
an unqualified librarian	3	
a teacher-librarian (qualified)	4	
a teacher-librarian (unqualified)	5	
a promoted member of staff	6	
a non-promoted member of staff	7	
an auxiliary	8	
a group of people (please specify)	9	
other (please specify)	10	

9. There is a central catalogue (or list) readily available of all the resources within the school

YES	1	
NO	2	

If your school does not have a central catalogue (or list), please miss out the next two questions and go on to question 12.

10. The physical format of your central catalogue is

cards	1	
sheaf	2	
printed out book	3	
edge punched cards	4	
optical coincidence cards	5	
other (please specify)	6	

11. Your central catalogue is

a catalogue classified by Dewey, or based on Dewey	1	
a catalogue classified by another scheme (please specify)	2	
a dictionary catalogue (i.e., author, title and subject in an alphabetical sequence)	3	
an alphabetical catalogue (i.e., author, title BUT NOT subject)	4	
key word indexed	5	
edge punched cards	6	
an optical coincidence scheme (OCCI)	7	
another system (please specify)	8	

SECTION THREE

12. The school has a room (or a part of a room) set aside for the preparation of home-made resources

YES	1	
NO	2	

If your school does not have a room (or a part of a room) set aside for the preparation of resources, please miss out the next question and go on to question 14.

13. This room (or part of a room) is

beside/next door to the library	1	
beside/next door to the central resources collection	2	
beside/next door to the library/ resources collection	3	
part of the library	4	
part of the resources collection	5	
part of the library/resources collection	6	
in another area (please specify)	7	

14. The school has a room (or a part of a room) set aside for reprographic activities

YES	1	
NO	2	

If your school does not have a room (or a part of a room) set aside for reprographic activities, please miss out the next question and go on to question 16.

15. This room (or part of a room) is

the same room as that used for the preparation of resources	1	
next door to the room used for the preparation of home-made resources beside the library	2	
beside/next door to the library	3	
beside/next door to the central resources collection	4	
beside/next door to the library/resources collection	5	
part of the library	6	
part of the resources collection	7	
part of the library/resources collection	8	
in another area (please specify).....	9	

16. Teachers in your school have their material reproduced

by doing it themselves	1	
by the school auxiliaries	2	
by school office staff	3	
by other methods (please specify)	4	

17. Materials in your school can be reproduced by

spirit duplicator	1	
ink duplicator	2	
off-set litho	3	
semi-wet photocopier	4	
heat copier	5	
3M type "Dual Spectrum" copier	6	
electrostatic copier (plain paper)	7	
electrostatic copier (coated paper)	8	
photocopier of a different kind (please specify)	9	
typewriter (carbon paper copies)	10	
electronic stencil cutter	11	
other methods (please specify)	12	

18. Your school has private study carrels/work bays for the pupils

YES	1	
NO	2	

If your school does not have private study carrels/work bays, please miss out the next question and go on to question 20.

19. The private study carrels/work bays are

in the library	1	
in the resources collection	2	
in the library/resources collection	3	
in another area (please specify)	4	

SECTION FOUR

If yours is a Secondary School, please miss out the next two questions and go on to Question 22. Please answer the next two questions ONLY if yours is a Primary School.

20. The subject area which is best covered by the material in the resources collection is

Languages/Arts	1	
Mathematics	2	
Environmental Studies	3	
Music/Art	4	
Others (please specify)	5	

21. In your opinion, the subject area, identified in Question 20, has the most material because

this subject area, and the methods associated with the teaching of it, make the use of resources especially appropriate	1	
the teacher in charge of this subject area is very enthusiastic about A-V aids and equipment	2	
this subject area has more money at its disposal	3	
the school has a tradition of multi media use in this subject area	4	
other factors (please specify)	5	

If yours is a Primary School, please miss out the next two questions and go on to Question 24. Please answer the next two questions ONLY if yours is a Secondary School.

22. The subject area which is best covered by the material in the resources collection is

English	1	
Modern Languages	2	
Science	3	
Mathematics	4	
Social Subjects, e.g., History, Geography, Economics, etc.	5	
Others (please specify)	6	

23. In your opinion, the subject area, identified in Question 22, has the most material because

many pupils take this subject area	1	
few pupils take this subject area	2	
this subject area, and the methods associated with the teaching of it, make the use of resources especially appropriate	3	
the teacher(s) of this subject area is/are very enthusiastic about learning resources	4	
this subject area has more money at its disposal	5	
the school has a tradition of multi media use in this subject area	6	
the materials can be used in other subject areas	7	
other factors (please specify)	8	

The remaining questions are to be answered by both Primary and Secondary Schools.

24. Within your own school your resources collection is used by

pupils under the supervision of a teacher	1	
pupils not under the supervision of a teacher	2	
teachers only	3	

25. Materials in your resources collection are used by

no other schools	1	
other Primary Schools	2	
other Secondary Schools	3	
others (please specify)	4	

If the materials in your resources collection are not used by other educational bodies, please miss out the next question and go on to Question 27.

26. If your resources collection is used by other schools, the materials reach these schools by

delivery/collection by individual teachers	1	
Post Office facilities	2	
the Education Authority's van	3	
other means (please specify)	4	

27. You issue a catalogue, or a part-catalogue, of what is in your resources collection

YES	1	
NO	2	

If you do not issue a catalogue (or part-catalogue), please miss out the next question and go on to Question 29.

28. If you do issue a catalogue (or part-catalogue), copies of the catalogue are distributed to

every member of your own school staff	1	
the local Primary Schools	2	
the local Secondary Schools	3	
your Area Resources Centre, where one exists	4	
your Divisional/Regional Resources Centre, where one exists	5	
your Education Authority	6	
any other central bodies (please specify)	7	
any other interested bodies (please specify)	8	

29. You receive copies of other educational bodies' catalogues containing details of their resources collections

YES	1	
NO	2	

If you do not receive copies of other educational bodies' catalogues, please miss out the next question and go on to Question 31.

30. If you do receive such catalogues, they are from

local Primary Schools	1	
local Secondary Schools	2	
your Area Resources Centre	3	
your Divisional/Regional Resources Centre	4	
other bodies (please specify)	5	

31. Please add any comments which you wish to make on this questionnaire or upon resources centres in general.

On behalf of SCET, I thank you for taking the time to complete this questionnaire. It will be of great help to me on this project. If there is any way by which I may assist you, please do not hesitate to get in touch with me.

David D Hamilton
Resource Liaison Officer

Telephone: 041 332 9988
Extension 248

PLEASE RETURN THE COMPLETED QUESTIONNAIRE TO:–

DAVID D. HAMILTON, Esq.,
Resource Liaison Officer,
Scottish Council for Educational Technology,
16-17 Woodside Terrace,
Glasgow, G3 7XN

APPENDIX B

Teachers' Comments about the Questionnaire

Only about 50 per cent of the one hundred and twenty nine Head Teachers, deputies and school librarians who replied to the questionnaire took advantage of the open-ended question which concluded the survey to make comments. Generally speaking, the remarks made could be divided into two types — those which provided factual details of divisional and regional resource organisation beyond the school and those which gave information about the school's resources system and the problems experienced in its operation. The former were most helpful to the overall project but it was the latter which provided particular interest. It was quite amazing to note how similar many of the opinions were. There appear to be three difficulties common to many schools trying to establish resources centres. Firstly, lack of staff.

> *"It has not proved possible to make one individual available on a full-time basis to operate our resources centre in this school. If and when this becomes possible, we should be able to function fairly well in this way."*
>
> *"The School Resources Centre was designed as part of a major extension to the buildings which have been recently completed. We had planned for a staff of four — Librarian, Clerical Assistant, Technician/Operator and Auxiliary — but local government cutbacks would not allow this. So we have a librarian. Development is, therefore, largely static until — or unless — we have an improvement in staffing. Our Resources Centre was intended to be the 'powerhouse' of the school but its full potential won't be realised until our masters come to realise its importance.*
>
> *"I feel that the vital matter for us at the moment is whether or not we are able to keep our auxiliary for without someone in charge it is doubtful — indeed I believe it'd be impossible — whether we could develop the resources room along the lines we wish."*
>
> *"If resource-based learning is to be established in schools adequate staffing — both teaching and auxiliary — must be provided. At present this is not the case."*

Not one respondent said that they thought they had sufficient, or excess, staff which is not at all surprising. The second problem was lack of money:

> *"In my position the primary barrier to providing an integrated and well stocked resources centre is simply* money. *The annual acquisition does not leave enough funds for the purpose of purchasing resources material after books and periodicals have been deducted."*
>
> *"Duplication of resources and materials is desirable. This ensures that when some resources are in use, duplicates are available. The cost, of course, is the factor. How many schools can afford to do this?"*

The third major area of concern was the lack or suitability of space for the resources centre. Resources centres are a relatively recent development in the educational world. Accordingly, not too many schools have had them purpose-built and so most schools have had to adapt libraries, classrooms etc. to accommodate the software, hardware, reprographic equipment *et al.* This can lead to all sorts of problems:

> *"There are three rooms allocated for our resources centre — two of which are, at present, full-time classrooms! The rooms are widely spread. Even with our one full-time chartered librarian and one job creation girl we've still a terrible problem knowing what's where. I'm sure the 'split-site problem' deters many teachers from using the centre."*

Other problems identified included the need for help in cataloguing resources. This comment was made not just by schools with no librarian, but also by large secondaries with library support:

> *"Without a proper catalogue — and we've not time to prepare one ourselves even if we knew how — I sometimes begin to wonder if it's really worth the effort. We've put in a lot of work here — at least some of the teachers have — but the more you do the more there seems to be needing done if the centre is to be run properly. It's like painting the Forth Road Bridge."*

"We're very vulnerable to staff absences. The issue and retrieval system breaks down if the promoted member of staff is absent or has other duties. There's no auxiliary to maintain and keep order and keep the catalogue up to date."

Teachers' attitudes were often mentioned — and usually critically:

"In order to accumulate materials for the resources room, I had to have the resources, book and non-book, of the classrooms catalogued. The teaching staff see the threat of the loss of their classroom-based materials as very real and are generally not convinced that the resources are the greater when pooled. I may say that in recent times the resources of the school have been unevenly distributed, thus generating suspicion of any effort to centralise them."

"The problem in establishing a resources centre is the compartmentalised attitude of certain subject heads who each want to build their own empires. It is difficult to foster a spirit of communication."

"The expected development of our library into a resources centre has not occurred, largely because of lack of staff demand. Resource-based learning requires a fundamental change in attitude — which takes time to bring about."

Some of the most encouraging remarks came from schools where the children clearly made heavy use of the resources centre:

"Originally we did not envisage that pupils would have complete *freedom of access to the resources centre but lack of staffing caused us to revise this opinion. At present pupils from P4–P7 have been taught how to retrieve and withdraw materials from it. It is significant, I think, that they perform better at this than the staff!"*

"As the Learning Resources Centre is run for direct use by pupils we found the need for a training programme in library skills so that teachers could confidently send unaccompanied groups to do individual work. We, therefore, run a course for all S1 classes in which basic instruction and practice in seeking and using information in book and non-book media are supplemented by individual project work. The pupils find their own information upon a chosen topic and work upon it for about a term at a time."

There was also criticism from some respondents — of the questionnaire:

"Your questionnaire concentrates on storage of resources rather than on their use."

"Our Library and 'central resources collection' are one and the same thing and yet you seem to see them as two separate entities."

"Your question 5 is not entirely understood. How do you keep a collection of TV programmes (item 23) except on video tapes (item 24)? Similarly, radio programmes (item 17) can only be stored on tape (item 1)."

"In this school we find ourselves in a quandary when attempting to answer this questionnaire, the reasons being — (a) we have only a partial *collection of resources held centrally (VCRs); (b) we have a central* catalogue *of* visual *materials but most of these materials are held departmentally."*

Certainly the saddest response, however, was this:

"The answers I have given in this questionnaire are the answers which applied to 13th June. On this day our school suffered a severe fire and, as a result, our central library and most of our resource material was completely destroyed. This meant a great loss to us, especially our collection of library books which amounted to approximately 3,000 books. Other resource material we were just starting to enlarge upon. Now, we are trying to re-build our resources.

I have filled in this questionnaire, nevertheless, in the hope that the information supplied may be of some help."